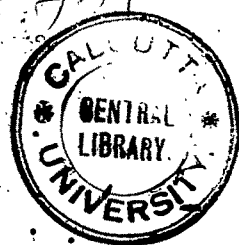


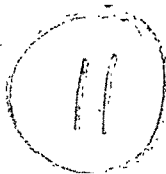
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(Aslib Book-List)

A MONTHLY LIST OF RECOMMENDED
SCIENTIFIC AND TECHNICAL BOOKS
with annotations

VOLUME 23 NUMBER 1



January 1958

Entries 1-62

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ASLIB, 4 PALACE GATE, LONDON, W.8

ASLIB BOOK-LIST VOL. 23 NO. 1 JANUARY 1958

P15771

Preface

THE AIM of the Aslib Book-List is to provide a list of recommended recently published books in the fields of science and technology, agriculture, social science, education, industrial organization, architecture, building and documentation, and general reference works. Where possible a brief annotation is added to indicate the scope of the book or the reasons for its recommendation. Recommendations are normally restricted to books in the English language, but an exception may be made for an outstanding foreign work.

In compiling the list, Aslib relies on the recommendations made by a number of subject specialists and special librarians, and without their help and co-operation such a list would not be possible.

The entries are arranged by the Universal Decimal Classification and are further classified by the following symbols:

- A* Books suitable for general readers, or books treating the subject in an introductory, elementary, or general manner.
- B* Books of an intermediate degree of technicality or suitable as textbooks for students.
- C* Books of an advanced or specially technical character.
- D* Directories, dictionaries, handbooks, lists and catalogues, encyclopaedias, year-books, and similar publications.

The regular transactions of societies are not included; nor are British Standard Specifications (except bound volumes). Any inquiry regarding the latter should be made direct to the B.S.I., 2 Park Street, London, W.1.

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Reference books and bibliographies: a union list [by] L. M. Payne [and] J. M. Harries. The Association, 1957. pp.xii,92, mimeographed. 6s. 6d. D
- BAER, E. A. 2
Titles in series: a handbook for librarians and students. Vol. 2: Books published prior to Jan. 1957. N.Y., Scarecrow P.; [London, Bailey & Swinfen], 1957. pp.xxx,1,167. \$6.50 or 61s. D
- GREAT BRITAIN. Patent Office 3
Periodical publications in the Patent Office Library: list of current titles. HMSO, 1957. pp.v,187. 7s. 6d. D
- NEW JERSEY LIBRARY ASSOCIATION 4
Who cares? about human relations: a selective and critical bibliography deeply concerned with the human relations of family, community, ethnic and racial groups, relation, education, business and industry. N.Y., Scarecrow P.; [London, Bailey & Swinfen], 1957. pp.vii,9-141. \$3 or 27s. D
- UNITED STATES. Library of Congress. *Technical Information Division* 5
Infrared: a bibliography, part II, by M. W. Ayton, T. J. Derby, V. H. Boteler [and] C. R. Brown; prep. for the office of Naval Research, Washington, U.S. Department of Commerce Office of Technical Services, 1957. pp.vi,150. \$3. PB121998. D
- WORLD MEDICAL ASSOCIATION and INTERNATIONAL UNION OF THE MEDICAL PRESS 6
World medical periodicals—Les périodiques médicaux dans le monde—Péridicos médicos del mundo—Medizinische Zeitschriften aller Länder. 2nd ed.; prep. by L. T. Morton. N.Y., World Medical Association; [London, British Medical Association], 1957. pp.xxxiii. \$6 or 30s. D

02 LIBRARIANSHIP

- BURKETT, J. 7
Microrecording in libraries: a review of present practice. Library Association, 1957. pp.55, plates, diags. 8s. 8d. (6s. 6d. to members). *Library Association pamphlet no. 17.* B
- CLOUGH, E. A. 8
Bookbinding for librarians. Association of Assistant Librarians, 1957. pp.204, illus., plates, tables, diags. 30s. (20s. to members). B.
- HEWITT, A. R. 9
Guide to resources for Commonwealth studies in London, Oxford, and Cambridge, with bibliographical and other information. Athlone P. for the Institute of Commonwealth Studies, 1957. pp.viii,219. 21s. D

- MORTON, L. T. 10
How to use a medical library: a guide for practitioners, research workers and students. 3rd ed. Heinemann, 1957. pp.vii,53. 7s. 6d. A
- ROYAL AGRICULTURAL SOCIETY OF ENGLAND 11
Survey of agricultural libraries in England and Scotland. The Society, 1957. pp.iii,75, mimeographed. 12s. 6d. D

3 SOCIAL SCIENCES

37 EDUCATION

- FEDERATION OF BRITISH INDUSTRIES 12
Report of the second national conference between industry and the technical colleges, 15th May 1957. The Federation, 1957. pp.vi,71, table. 5s. B
- KLINE, G. L., ed. 13
Soviet education: foreword by G. S. Counts. Routledge & K. Paul, 1957. pp.xi, 192. 21s.
Reports by former Soviet teachers and students concerning education in the 1920s, 1930s, and early 1940s. Anti-Soviet bias. B
- MALLINSON, V. 14
An introduction to the study of comparative education. Heinemann, 1957. pp.ix,249, diags., bibliog. 21s. A
- PETERSON, A. D. C. 15
Educating our rulers. Duckworth, 1957. pp.93. 7s. 6d.
Three lectures delivered at Oxford in 1957 with suggestions for ensuring that education today shall fit boys and girls for an age of science. A
- SIMON, B., ed. 16
New trends in English education: a symposium. MacGibbon & Kee, 1957. pp.215, tables. 25s.
Accounts of experiments in junior secondary modern and comprehensive schools by teachers undertaking them. A
- The YEAR Book of Education, 1957 17
Education and philosophy; eds. G. Z. Berday and J. A. Lauwerys. London, Evans, in association with the University of London Institute of Education and Teachers' College Columbia University, 1957. pp.xix,578. 63s.
Examines the relationship that exists in the total cultural pattern between philosophical systems and educational practices. D

5 NATURAL SCIENCES

- ANTHONY, H. D. 18
Science and its background. 3rd ed. London, Macmillan; N.Y., St Martins P., 1957. pp.ix,352, illus., tables, diags. 20s. A
- BUTTERFIELD, H. 19
The origins of modern science, 1300-1800. New ed. Bell, 1957. pp.x,242, bibliog. 16s.
Previous ed. 1949. A-B

51 MATHEMATICS

- HAILS, J. S. and HOPKINS, E. J. 20
Solid geometry. OUP, 1957. pp.vii,196, diagrs. 13s. 6d.
Deals with points, lines, and planes in three dimensions, and the elementary geometry of the familiar space-figures, such as the polyhedra, the cone, cylinder, and sphere. Excellent collection of examples for the student. B
- SPAIN, B. 21
Analytical conics. Vol. 3. London, N.Y., Pergamon P., 1957. pp.ix,145, diagrs. 30s. *International series of monographs on pure and applied mathematics*, ed. by I. N. Sneddon.
A succinct account of elementary conics, but the introductory chapters are rather too concise for the novice who would be well advised to treat this book as a second course. B
- WHITNEY, H. 22
Geometric integration theory. Princeton (N.J.), Princeton U.P.; London, OUP, 1957. pp.xv,387. 68s. *Princeton mathematical series*, ed. by Marston Morse and A. W. Tucker, no. 21.
The main purpose of this book, which is in three parts, is to study in a broad geometric and analytic setting the integral of a quantity over an r -dimensional manifold M in n -dimensional space E^n as a function of the position of M in E^n . C

52 ASTRONOMY

- KUHN, T. S. 23
The copernican revolution: planetary astronomy in the development of Western thought. Cambridge (Mass.), Harvard U.P.; London, OUP, 1957. pp.xix,297, diagrs., bibliog. 45s. A-B
- MOORE, P. 24
The amateur astronomer. Lutterworth P., 1957. pp.317, plates, tables, diagrs., bibliog. 25s.
An excellent guide to the beginner who is interested in astronomy as a hobby. Explains our own solar system and adds a very short chapter describing the galaxy system. A

53 PHYSICS

- COLSTON RESEARCH SOCIETY 25
Observation and interpretation: a symposium of philosophers and physicists; proceedings of the ninth symposium of the Society held in the University of Bristol, April 1st-April 4th 1957. Ed. by S. Körner in collaboration with M. H. L. Pryce. London, Butterworths; N.Y., Academic P., 1957. pp.xiv,218, plates, diagrs., 40s. or \$8. C
- HUNTER, J. L. 26
Acoustics. Englewood Cliffs, N. J., Prentice-Hall; London, Bailey & Swinfen, 1957. pp.xv,407, illus., tables, diagrs. 76s. 6d.
Covers the whole field of acoustics including sound recording, speech, hearing, noise, and intelligibility; acoustic measurements; ultrasonics and underwater sound. A good introduction to a complex branch of physics. B

MEGAW, H. D.

27

Ferroelectricity in crystals. Methuen, 1957. pp.iii+xi,220, plates, tables, diags., bibliog. 27s. 6d.

Deals first with the different compounds or classes of compounds exhibiting the phenomenon in different ways, and later with the different types of theories put forward to explain it. Some knowledge of physics, chemistry, mathematics, and crystallography is required. B

54 CHEMISTRY

FRITZ, J. S. and HAMMOND, G. S.

28

Quantitative organic analysis. N.Y., Wiley; London, C & H, 1957. pp.ix,303, diags. \$6.50 or 52s.

Includes chapters on acid-base titration, oxidative, and reductive methods, manometric methods, metal-ion complexes, elemental analysis, spectroscopy, and polarography and separations, with a useful chapter on the approach to new analytical problems. B

KLYNE, W.

29

The Chemistry of the steroids. London, Methuen; N.Y., Wiley, 1957. pp.216, tables, diags., bibliog. 18s. *Methuen's monographs on biochemical subjects, gen. eds. R. Peters and F. G. Young.*

Stereo chemistry and physical properties are well described. Chemical properties are discussed in some detail and a remarkably full choice of naturally occurring steroids is dealt with individually. B

SCHWARZENBACH, G.

30

Complexometric titrations, tr. [from the German] and rev. in collaboration with the author by H. Irving. London, Methuen; N.Y., Interscience, 1957. pp.xviii,132, tables, diags., bibliog. 21s.

Originally published as *Die Komplextometrische Titration*. Ferdinand Enke Verlag, Stuttgart, 1955. By his discovery of metal-indicators the author made one of the very great contributions to chemical knowledge since the war; this edition records new processes and contains new diagrams. C

55 GEOLOGY

551.5 Meteorology

LUDLAM, F. H. and SCORER, R. S.

31

Cloud study: a pictorial guide prepared under the auspices of the Royal Meteorological Society. Murray, 1957. pp.80, illus., diags. 12s. 6d.

Particular reference is made to cloud structure and mode of formation. A-B

MASON, B. J.

32

The physics of clouds. Oxford, Clarendon P., 1957. pp.xx,481, plates, tables, diags., bibliog. 70s.

First comprehensive account of the last ten years, during which period the subject has made immense strides forward. C

UNITED STATES AIR FORCE. Geophysics Research Directorate

33

Exploring the atmosphere's first mile: proceedings of the Great Plains Turbulence Field Program, 1st Aug.-8th Sept. 1953. Ed. by H. H. Lettau and B. Davidson. London, [etc.], Pergamon P., 1957. 2v. 140s. or \$40.

Vol. 1: Instrumentation and data evaluation, pp.xiv,376, illus., tables, diags. Vol. 2: Site description and data tabulation, pp.v,578, tables, diags. C

- UNITED STATES AIR FORCE. Geophysics Research Directorate 34
Artificial stimulation of rain: proceedings of the first conference on the physics of cloud and precipitation particles held at Woods Hole Oceanographic Institution, Woods Hole, Massachusetts, Sept. 7th-Sept. 10th 1955. Ed. by H. Weickmann and W. Smith. London, [etc.], Pergamon P., 1957. pp.xvi,427, illus., tables, diagrs. 105s. or \$15. C

57 BIOLOGY

- AVENEL, A. 35
View from Orbit II: foreword by P. L. Binstock, Laurie, 1957. pp.x,11-168, plates, tables, diagrs., bibliog. 18s.
A fresh point of view brought to an old theme. The author's exposition of space and time is interesting and the theory of unity of energy and matter, though not original, is well explained. A-B
- BEAGLEHOLE, E. 36
Social change in the South Pacific: Rarotonga and Aitutaki. A & U, 1957. pp.ix,268, tables. 28s. A-B
- CARTER, G. S. 37
A hundred years of evolution. Sidgwick and Jackson, 1957. pp.x,206, diagrs. 21s.
The first part deals with Darwin's theory of evolution, the second gives an account of the development of ideas in the twentieth century. Scholarly and persuasive. This will also be of interest to the layman. B
- DARWIN, C. R. 38
The Darwin reader; ed. by M. Bates and P. S. Humphrey. Macmillan, 1957. pp.ix,481, illus., diagrs., bibliog. 30s.
Originally published New York, Scribner, 1956. A selection from a wide range of Darwin's writings forming a one-volume compendium of Darwinian theory in his original words. B
- FIRTH, R., ed. 39
Man and culture: an evaluation of the work of Bronislaw Malinowski. Routledge & K. Paul, 1957. pp.viii,292, illus., bibliog. 32s. B

59 ZOOLOGY

- LANE, F. W. 40
Kingdom of the octopus: the life history of the cephalopoda. Jarrolds, 1957. pp.xx,287, diagrs., bibliog. 30s. A-B
- BLAIR, W. F. and others 41
Vertebrates of the United States. N.Y., [etc.], London, McG-H, 1957. pp.ix,819, illus., tables, bibliog. \$12 or 90s.
Collaborators: W. F. Blair, A. P. Blair, P. Brodkorb, F. R. Cagle, G. A. Moore. B-C
- WRIGHT, A. H. and WRIGHT, A. A. 42
Handbook of snakes of the United States and Canada. Ithaca (N.Y.), Comstock Publishing Associates; London, Constable, 1957. pp.1105, diagrs., bibliog. 2v. 126s. *Handbooks of American natural history*, ed. by A. H. Wright. B

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6 APPLIED SCIENCES

62 ENGINEERING

621 Mechanical engineering

COMMITTEE ON VACUUM TECHNIQUES

43

Transactions: 1956 National Symposium on vacuum technology. Oct. 10th, 11th, 12th, Chicago. Ed. by E. S. Perry and J. H. Durant. London, N.Y. [etc.], Pergamon P., 1957. pp.234, illus., tables, diagrs. 90s. or \$12.50.

Should be of great interest to those working with vacuum devices or interested in some of the aspects of the technique. B

SET-UPS on Automatics

44

Brighton, London, Machinery Publishing Co., 1957. pp.72, illus., diagrs. 4s. 6d. *Yellow back series, no. 41.*

Examples given of set-ups to do various jobs on automatic lathes from which the production engineer will be able to appreciate the scope of the machine tools at his disposal and be inspired to solve his production problems. C

621.039 Nuclear engineering

ORGANISATION FOR EUROPEAN ECONOMIC CO-OPERATION

45

Industrial challenge of nuclear energy: papers given during the first information conference on nuclear energy for management. Paris, O.E.E.C.; [London, HMSO], 1957. pp.291, illus. \$5 or 30s.

Economic aspects and industrial applications of nuclear energy. C

621.9 Machine tools

MECHANISED work-handling in the machine tool

46

Brighton, London, Machinery Publishing Co., 1957. pp.68, illus., diagrs. 4s. 6d. *Yellow back series, no. 42.*

A practical handbook which will help the production engineer to decide what he can add to his existing machine tools to improve their efficiency. C

629 Transport engineering

BUEDELER, W.

47

Operation Vanguard: earth satellite, tr. [from the German] by A. L. Helm. Burke, 1957. pp.viii,9-128, illus., plates, diagrs. 16s.

Describes the American satellite programme now in progress, discusses the reasons for it and what it is hoped to gain from the time and effort expended. A

BURGESS, E.

48

Satellites and spaceflight. C & H, 1957. pp.vii,159, plates, tables, diagrs., bibliog. 21s.

Distinguishes clearly between what is possible within the limits of present knowledge and where further research and development is needed before a major advance can take place. A

GATEWOOD, B. E.

49

Thermal stresses: with applications to airplanes, missiles, turbines, and nuclear reactors. N.Y. [etc.]; London, McG-H, 1957. pp.xv,232, tables, diagrs., bibliog.

\$7.50 or 56s. 6d. *McG-H publications in aeronautical science*, ed. by J. C. Hunsaker.

Primarily for aeronautical engineers engaged on aircraft structural analysis and design but should prove useful to anyone concerned with thermal stresses. C

OPERTH, H. 50

Man into space: new projects for rocket and space travel, tr. from the German by G. P. H. de Freville. Weidenfeld & Nicholson, 1957. pp.xiv,232, plates, diagrs. 25s.

Originally published as *Menshen im Weltraum*. The author's current ideas in language which can be understood by those with little background in the physical sciences. A

65 COMMUNICATIONS, COMMERCE, and ORGANIZATION

COPEMAN, G. 51

Promotion and pay for executives. Business Publications in association with Batsford, 1957. pp.x,11-216, tables. 18s.

Based on 'confidential and anonymous interviews' with fifty executives. The essence of this book is contained in a few pages which show the careers and salary changes of forty-five executives in tabulated form. Generalizations fill the rest of the book. A

STEWART, R. 52

Managers for tomorrow. HMSO for DSIR, 1957. pp.40, illus., diagrs. 2s. 6d. *Problems of progress in industry*, no. 2. B

655 Printing, publishing, book trade

VAN KRIMPEN, J. 53

On designing and devising type. N.Y. Typophiles; London, Sylvan P., 1957. pp.109, illus. 21s. B

66 CHEMICAL TECHNOLOGY

669 Metallurgy

MCLEAN, D. 54

Grain boundaries in metals. Oxford, Clarendon P., 1957. pp.x,346, plates, tables, diagrs., bibliog. 50s. *Monographs on the physics and chemistry of materials*, gen. eds. W. Jackson, H. Fröhlich, N. F. Mott, E.C. Bullard.

Written clearly with due attention to the basic problems involved and should have a wider appeal than its title might suggest. C

678.5 Plastics

GLANVILL, A. B. 55

Plastics materials handbook: a concise reference of the principal plastic materials giving their physical, mechanical, and electrical properties, forms, colours, applications, decoration, cementing, etc. Brighton, Machinery Publishing Co., 1957. pp.67, tables, diagrs. 4s. 6d. *Yellow back series*, no. 40.

In handy form for quick reference by manufacturers who require to use unfamiliar plastic raw materials. B

KITCHENER, J. A.

56

Ion-exchange resins. London, Methuen; N.Y., Wiley, 1957. pp.vii,109, illus., tables, diagrs., bibliog. 9s. 6d. *Monographs on physical subjects, ed. by H. J. Emeléus and D. W. Style.*

Deals with the preparation of ion-exchange resins and the basic principles of their application, with the kinetics of ion exchange, and with the physical chemistry of exchange equilibria. B-C

69 BUILDING

CLIFFORD, N.

57

Timber identification for the builder and architect. L. Hill, 1957. pp.141, plates, tables. 37s. 6d.

The principles of identification and the characteristics of timbers in three groups: common softwoods and hardwoods; important commercial timbers; other timbers of commercial importance. B

OSBORNE, A. L.

58

Electricity in building, by A. L. Osborne, in conjunction with the British Electrical Development Association. Batsford, 1957. pp.160, illus., tables, diagrs. 25s.

An up-to-date exposition of an important part of the general technique of modern building. B

SHORE, B. C. G.

59

Stones of Britain. L. Hill, 1957. pp.xii,302, illus. 66s.

Illustrated guide to the geology, chemistry, preservation, and repair of British building stones. B

7 FINE ARTS

72 ARCHITECTURE

BOYNE, D. A. C. A. and WRIGHT, L., eds.

60

Architects' working details. Vol. 4. Architectural P., 1957. pp.160, illus. 25s.

Photographs and sections of recent examples of windows, doors, staircases, etc. B

ROPER, J. S.

61

Historic buildings of Wolverhampton: a study of fifteen buildings in the town dating from medieval times to 1873; with photographs by H. M. Parkyn and M. Roper. Dudley (Staffs), Roper, 1957. pp.67, illus. 7s. 6d.

Details of construction, with notes on their social and economic history. A

9 HISTORY-GEOGRAPHY

92 BIOGRAPHY

JONES, E.

62

Sigmund Freud: life and work. Vol. III. The last phase 1919-1939. Hogarth P., 1957. pp.536, plates. 35s.

The first part covers Freud's personal life and the second is devoted to the development of his psychoanalytical theories during the period under review. B

Publishers

THE FOLLOWING ABBREVIATIONS ARE USED IN ASLIB BOOK-LIST

A & U Allen & Unwin
C & H Chapman and Hall
CUP Cambridge University Press
HMSO Her Majesty's Stationery Office
McG-H McGraw-Hill
O & B Oliver and Boyd
OUP Oxford University Press
ULP University of London Press

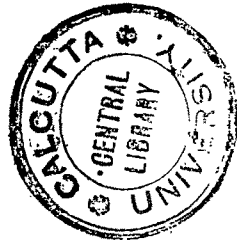
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ASLIB BOOK-LIST VOL. 23 NO. 2 FEBRUARY 1958

Preface

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002 Documentation

- SHERA, J. H. *and others, eds.* 63
Information systems in documentation; eds. J. H. Shera, A. Kent and J. W. Perry; based on the symposium on systems for information retrieval held at Western Reserve University, Cleveland, Ohio, in April 1957. N.Y., London, Interscience, 1957. pp.xix,639, illus., tables, diagrs. \$12 or 92s. B

01 BIBLIOGRAPHY

- FORD, P. *and* FORD, G. 64
A breviat of parliamentary papers, 1900-1916, the foundation of the welfare state. Oxford, Blackwell, 1957. pp.xlix,470. 92s. 6d. *Parliamentary papers series.* D
LEWIS, H. K. *AND CO. LTD.* Medical, Scientific and Technical Lending Library 65
Catalogue. New ed. rev. to December 31, 1956. H. K. Lewis, 1957. pp.xii,1178. 42s. (25s. to subscribers). D
WEPSIEC, J. 66
Polish periodicals, 1953-1956: an annotated bibliography. Washington, Catholic University of America P., 1957. pp.v,169, mimeographed. \$3.50. D

02 LIBRARIANSHIP

- HEWITT, R. A. 67
Style for print and proof-correcting. Blandford P., 1957. pp.xvi,334, tables, bibliog. 35s.
A guide to the preparation of copy for the press. A
LIBRARY ASSOCIATION 68
Proceedings, papers and summaries of discussions at the Harrogate conference, 17th-20th September, 1957. The Association, 1957. pp.81. 4s. B

04 ESSAYS

- HUXLEY, J. 69
New bottles for new wine: essays. London, Chatto & Windus; Toronto, Clarke Irwin, 1957. pp.318, plates, diagrs. 21s.
Scientific essays and essays on the philosophical outlook of an eminent biologist. A

1 PHILOSOPHY

159.9 Psychology

- HUNTER, I. M. L. 70
Memory: facts and fallacies. Harmondsworth, Penguin Books, 1957. pp.186, tables, bibliog. 3s. 6d. *Pelican psychology series.*
Presents a reliable popularized summary of experimental studies in the psychology of memory with practical hints for efficient memorizing. A

3 SOCIAL SCIENCES

301 Sociology

POLLOCK, F.

71

The economic and social consequences of automation, tr. [from the German] by W. O. Henderson and W. H. Chaloner. Oxford, Blackwell, 1957. pp.[12], 276, tables, diags., bibliog. 25s.

Mainly concerned with the social and economic consequences of automation, but a short account of the technical methods and devices used has been included. C

331 Industrial relations

LIVERPOOL. University. Department of Social Science. *Industrial Research Section*.

Men, steel and technical change. HMSO, 1957. pp.36, illus., tables, diags. 2s. *Department of Scientific and Industrial Research. Problems of progress in industry—1.* B

WILLIAMS, G.

73

Recruitment to skilled trades. London, Routledge & K. Paul; N.Y., Humanities P., 1957. pp.vii, 216, tables. 23s. *International library of sociology and social reconstruction, ed. by W. J. H. Sprott.* A-B

36 WELFARE and INSURANCE

RAYNES, H. E.

74

Social security in Britain: a history. Pitman, 1957. pp.vii, 244, tables, bibliog. 30s.

A history from the early guilds to the present day. A

368 Insurance

DOVER, V.

75

A handbook to marine insurance. 5th ed. Witherby, 1957. pp.xv, 827. 70s.

A new edition of a comprehensive standard textbook of the law and practice. B

4 PHILOLOGY

413 Dictionaries

76

CONFERENCE terminology: a manual for conference-members and interpreters in English, Russian, French, Italian, Spanish, German. Amsterdam, Elsevier; [London, Cleaver-Hume], 1957. pp.xv, 147. 12s. 6d. *Glossaria interpretum; ed. J. Herbert.* D

5 NATURAL SCIENCES

51 MATHEMATICS

MIKHLIN, S. G.

77

Integral equations and their applications to certain problems in mechanics, mathematical physics and technology, tr. [from the Russian] by A. H. Armstrong. Vol. 4. London, N.Y. [etc.], Pergamon P., 1957. pp.xii, 338, diags., bibliog. 80s. or \$12.50. *International series of monographs in pure and applied mathematics, ed. by I. N. Sneddon.*

This ed. originally published in Moscow, 1949. There are chapters dealing with the elementary Fredholm theory and the Hilbert-Schmidt theory of the symmetric kernel. The applications are chiefly to hydrodynamics and elasticity. C

519. Statistical mathematics

VON MISES, R.

78

Probability, statistics and truth. 2nd rev. English ed. prep. by H. Geiringer. London, A & U; N.Y., Macmillan, 1957. pp.xiv,244, tables. 28s.

Originally published as *Wahrscheinlichkeit, statistik und wahrheit*, 3rd ed. Vienna, Springer, 1951. Previous English ed. 1951. The concept of randomness is carefully reformulated, recent work in the basic definitions of probability theory is considered, and comments are made on the testing of hypotheses, etc. B

52 ASTRONOMY

526 Geodesy

RAINSFORD, H. F.

79

Survey adjustments and least squares. Constable, 1957. pp.ix,326, tables, diagrs., bibliog. 50s.

A theoretical review followed by a section on the numerical solutions of systems of equations. Will be of assistance to those engaged on surveys of large areas. B-C

53 PHYSICS

BURRIS-MEYER, H. and GOODFRIEND, L. S.

80

Acoustics for the architect. N.Y., Reinhold; [London, C & H], 1957. pp.126, illus., tables, diagrs., bibliog. \$10 or 80s.

A comprehensive study of acoustical principles necessary in planning buildings, including a survey of the special requirements of different types of buildings. C

EDMONDS, A.

81

Angular momentum in quantum mechanics. Princeton (N.J.), Princeton U.P.; London, OUP, 1957. pp.viii,146, tables, diagrs., bibliog. \$3.75 or 30s. *Investigation in physics, no. 4.*

Covers the methods employed in practical quantum mechanical calculations when full account is taken of the rotational symmetries of the system under consideration. C

JAKOB, M. and HAWKINS, G. A.

82

Elements of heat transfer. 3rd. ed. N.Y., Wiley; London, C & H, 1957. pp.xxv, 317, illus., tables, diagrs. \$5 or 54s.

A very useful practical handbook generally brought up to date. The various problems encountered in engineering in connection with heat transfer and insulation are discussed in detail. B

539.1 Atomic energy

ARNOTT, D. G.

83

Our nuclear adventure: its possibilities and perils. Lawrence & Wishart, 1957. pp.xi,170, illus., plates, diagrs. 11s. 6d.

Although the whole field of nuclear energy is surveyed, including nuclear power, weapons, and radiations, the emphasis is on the latter and on their physiological and genetic effect on human beings. A

FAIRES, R. A. and PARKES, P. H.

84

Radioisotope laboratory techniques: foreword by H. Seligman. Newnes, 1958. pp.xii,244, plates, tables, diagrs., bibliog. 25s.

A most useful book: covers in a clear and elementary manner problems of experimental technique, equipment, and feasibility. B

54 CHEMISTRY

- BAGNALL, K. W. 85
Chemistry of the rare radioelements: polonium-actinium. Sponsored by the United Kingdom Atomic Energy Authority, Harwell. London, Butterworths; N.Y., Academic P., 1957. pp.x,177, plates, tables, bibliog. 30s. or \$5.
Assembles all reliable data on the six elements which are the rarest and most radioactive of the Periodic Table—polonium, astatine, francium, radon, radium, and actinium. C
- HAMANN, S. D. 86
Physico-chemical effects of pressure. London, Butterworths; N.Y., Academic P., 1957. pp.ix,246, tables, diagrs., bibliog. 42s. or \$8.50.
A fairly brief but comprehensive account of the most important methods by which high pressures are produced, contained, and measured, and in greater detail of the physical and chemical effects produced by high pressures. B
- KATZ, J. J. and SEABORG, G. T. 87
The chemistry of the actinide elements. London, Methuen; N.Y., Wiley, 1957. pp.xv,508, plates, tables, diagrs. 63s.
The chemistry of the elements is presented in order of their atomic numbers, and the account is concluded with a very good chapter summarizing and correlating the properties of the elements and their compounds. B
- MORRISON, G. H. and FREISER, H. 88
Solvent extraction in analytical chemistry. N.Y., Wiley; London, C & H, 1957. pp.xi,269, tables, diagrs. \$6.75 or 54s.
A complete reference work which should give chemists a pointer to the scope of solvent extraction techniques. B-C
- SNEED, M. C. and others, eds. 89
Comprehensive inorganic chemistry. [ed. by] M. C. Sneed, J. L. Maynard, R. C. Brasted. Vol. 6: The alkali metals, [by] J. F. Suttle. Hydrogen and its isotopes [by] R. C. Brasted. Princeton (N.J.); London, [etc.], Van Nostrand, 1957. pp.viii,234, tables, diagrs. \$6 or 45s.
Vol. 4 listed in *Aslib Book List*, March 1956. Aims to provide a comprehensive treatment of the chemistry and technology of the elements and their compounds. B
- WILLARD, H. H. and others 90
A short course in quantitative analysis, by H. H. Willard, N. H. Furman and E. H. Bacon. 2nd ed. Princeton (N.J.); London, Van Nostrand, 1957. pp.vi,243, diagrs. \$4.25 or 32s.
A welcome addition, but it should be approached with caution: the application of statistical methods to chemistry is controversial among chemists. B

548 Crystallography

- PARRISH, W., comp. 91
World directory of crystallographers. Irvington-on-Hudson, N.Y., Philips Laboratories, 1957. pp.xvi,79, tables. \$2. *Philips Laboratories contribution no. 115.* D
- WOOSTER, W. A. 92
Experimental crystal physics. Oxford, Clarendon P., 1957. pp.viii,115, tables, diagrs., bibliog. 18s.
The experiments described in the text are designed to be completed by the student. The description of apparatus for each experiment is good and the working-up data obtained during the experiment are clearly presented. B

571 Prehistory

- ALIMEN, H. 93
 The prehistory of Africa, tr. [from the French] by A. H. Brodrick. Hutchinson, 1957. pp.xviii,438, illus., plates, tables, diagrs., bibliog. 63s.
 Originally published as *Préhistoire de l'Afrique*. Paris, 1955. B

58 BOTANY

- GREIG-SMITH, P. 94
 Quantitative plant ecology. Butterworths, 1957. pp.ix,198, tables, diagrs. 30s.
 Discusses the value of quantitative methods in sampling and comparison, in pattern study, in the examination of species association, in the correlation of vegetation with habitat factors, and in the study of plant communities as units. C
 MILLER, E. V. 95
 The chemistry of plants. N.Y., Reinhold; London, C & H, 1957. pp.vii,174, tables, diagrs., bibliog. \$4.75 or 38s.
 May be regarded in effect as a series of twelve concise up-to-date essays. B

6 APPLIED SCIENCES

615 Pharmacy

- BRITISH MEDICAL ASSOCIATION and PHARMACEUTICAL SOCIETY OF GREAT BRITAIN. *Joint Formulary Committee*. 96
 British national formulary, 1957. British Medical Association; Pharmaceutical P., 1957. pp.226, tables. 6s. 6d.
 A pocket guide to drugs in current use, including proprietary names. D

619 Veterinary science

- GARNER, R. J. 97
 Veterinary toxicology; formerly Lander's *Veterinary toxicology*. Baillière Tindall & Cox, 1957. pp.415, tables, bibliog. 35s.
 Standard English text on poisoning in animals. B

62 ENGINEERING

620.1 Strength of materials

- KINNEY, G. F. 98
 Engineering properties and application of plastics. N.Y., Wiley; London, C & H, 1957. pp.vii,278, tables, diagrs. \$6.75 or 54s.
 Includes a brief outline of the chemistry of various materials with useful tables correlating general properties and price, but these data relate to American products. B

621.3 Electrical engineering

- MCGHEE, H. A. 99
 Industrial television: design and application of television equipment in industry, education and science. Newnes, 1957. pp.vii,120, illus., diagrs. 15s.
 This is in no sense a television textbook but rather a work on the applications of television techniques to industry. B

621.4 Internal combustion and heat engines

- RICHMOND, A. J. 100
 Problems in heat engines. Edward Arnold, 1957. pp.xi,272, diagrs. 14s.
 Consists of groups of worked examples with additional examples for the student to complete. B

623 Military and Naval engineering

- HICKS, J. E. 101
Notes on U.S. ordnance: illus. by A. Jandot; vol. 1. U.S. firearms, 1776-1956. Beverly Hills (Calif.), Fadco, 1957. pp.216, illus. \$12.50. B

624 Civil engineering

- HUNTINGTON, W. C. 102
Earth pressures and retaining walls. N.Y., Wiley; London, C & H, 1957. pp.xv, 534, diagrs., bibliog. \$11.50 or 92s.
Based largely on the classical earth pressure theories of Coulomb and Rankine and the more modern work of Terzaghi and Peck. B
- PANNELL, J. P. M. 103
Materials of civil engineering. Hutchinson, 1957. pp.248, plates, diagrs., bibliog. 30s.
Covers almost all the materials used in civil engineering from the soil to plastics, including timber, iron, steel, cement, and concrete. B
- YOUNG, J. M. 104
Reinforced concrete, 3rd ed. Crosby Lockwood, 1957. pp.ix,121, tables, diagrs. 12s. 6d.
Previous ed. 1944. B

628 Sanitary engineering

- AMERICAN SOCIETY OF HEATING AND AIR CONDITIONING ENGINEERS 105
Heating, ventilating, air conditioning guide, 1957. Vol. 35. N.Y., The Society, 1957. pp.xxiv,1248,40,520, illus. \$12.
The revisions to the 34th volume include new design procedures for hot water heating systems, heating panels, forced warm air systems, steam heating systems, pipe insulation, district heating, and absorption systems. B

63 AGRICULTURE

- CULPIN, C. 106
Farm machinery. 5th ed. rev. Crosby Lockwood, 1957. pp.668, illus., tables, diagrs. bibliog. 35s.
Previous ed. 1952. Brings up to date what is now regarded as a standard textbook on the agricultural machinery at present in use in Britain. B

636 Stock

- CUNHA, T. J. 107
Swine feeding and nutrition. N.Y., London, Interscience, 1957. pp.xv,296, illus., tables, bibliog. \$5 or 38s. *Animal feeding and nutrition series, ed. by H. R. Rosenberg, no. 1.*
A review of current American practice and research on pig feeding. B

65 COMMUNICATIONS, COMMERCE, and ORGANIZATION

651/652 Office management

- ANTHONY, R. N. and SCHWARTZ, S. 108
Office equipment: buy or rent? Boston, Mass., Management Analysis Center, 1957. pp.xii,92, tables. \$15. B

CONTROLLERSHIP FOUNDATION, INC. 109

Case studies in records retention and control prepared by J. Moberley, E. D. Holbrook, W. L. Rofes and H. F. Klingman. N.Y., The Foundation, 1957. pp.xi,455, illus., tables, diagrs. \$7.50. *Series VII, no. 1.* B

OFFICE APPLIANCE AND BUSINESS EQUIPMENT TRADES ASSOCIATION 110

The manual of modern business equipment. Macdonald & Evans for the Association, 1957. Parts 22-26, 22s. 6d. Each part 4s. 6d.

Part 22: Retail cash and credit control methods and machines. pp.68, illus. Part 23: Time control systems. pp.43. Part 24: Recorded dictation, pp.36, illus., diagrs. Part 25: Addressing machines. pp.35, illus., diagrs. Part 26: Seating. pp.32, illus. B

658 Industrial management

EDWARD, J. D. 111

Managers: making or marring them. Macdonald & Evans, 1957. pp.232, diagrs. 17s. 6d.

Originally published as *Executives: making them click*. N.Y., University Books, 1956. Will appeal to managers and other responsible personnel in industry, commerce, or the public services and is likely to be found valuable because of the realistic way in which it treats its matter. A

ROSE, T. G. 112

Business charts: a clear explanation of the various types of charts used in business, and of the principles governing the correct presentation of facts by graphical methods; with a foreword by G. Cunningham. 5th ed. Pitman, 1957. pp.xii, 132, illus., plates, tables, diagrs. 21s. B

WHELDON, H. J. 113

Business statistics and statistical method. 4th ed.; completely rev. by G. L. Thirkettle. Macdonald & Evans, 1957. pp.ix,270, illus., tables, diagrs. 15s. B

66 CHEMICAL TECHNOLOGY

664 Food industries

CLARKE, R. J. 114

Process engineering in the food industries. Heywood, 1957. pp.viii,355, illus., tables, diagrs., bibliog. 60s.

As an introductory work for those just entering this field, and for manufacturing personnel who want background information on the engineering aspects of food manufacture this should prove useful. B

LYLE, O. 115

Technology for sugar refinery workers. 3rd ed., rev. and enl. C & H, 1957. pp.663, tables, diagrs. 70s.

Previous ed. 1950. Although originally written for sugar refinery workers it is invaluable as a reference work for all those engaged in food manufacture. B

67/68 MANUFACTURES

676 Paper

BALSTON, T. 116

James Whatman, father and son. Methuen, 1957. pp.xi,170, plates, tables, diagrs. 30s.

A well-documented account of the Whatman mills and their products, compiled from mill ledgers, local records, etc., with a brief outline of domestic background of two famous paper-makers. A-B

678 Rubber

- NORMAN, R. H. 117
Conductive rubber: its production, application and test methods. MacLaren & Sons, 1957. pp.99, tables, diagrs., bibliog. 16s.
Reprinted from *Rubber Journal*. Although the emphasis is on conductive rubber, there is much of value to those interested in electrical testing of normal rubbers. Test methods are shown in detail and a critical evaluation of possible electrode systems. C

- PARKINSON, D. 118
Reinforcement of rubbers. Lakeman for the Institution of the Rubber Industry, 1957. pp.vi,102, plates, tables, diagrs., bibliog. 25s. *Institution of the Rubber Industry. Monographs*.
The fundamentals and applications of rubber compounding in concise form, with chapters on properties of carbon black and other fillers and their influence on rubber. C

7 FINE ARTS

77 PHOTOGRAPHY

- BENTLEY, T. L. S. 119
Manual of the miniature camera. 5th ed., rev. and enl. Newnes, 1957. pp.vii,296, illus., tables, diagrs. 21s.
Previous ed. 1953. All aspects of photography covered by eight experts. A-B
- HUNT, R. W. G. 120
The reproduction of colour; foreword by W. D. Wright. Fountain P., 1957. pp.205, plates, tables, diagrs. 63s.
Covers the scientific principles involved in colour photography, colour printing, and colour television. Will become a standard textbook for workers in these industries. C

9 HISTORY-GEOGRAPHY

91 GEOGRAPHY

- FISHER, W. B. 121
The Middle East: a physical, social and regional geography. 3rd ed. reprinted with minor corrections. London, Methuen; N.Y., Dutton, 1957. pp.xiii,522, plates, tables, diagrs., bibliog. 35s. *Advanced geography series*.
First published 1950, this ed. first published 1956. Full accounts of the structure, soils, climate, vegetation, natural resources, and economic and social history. C
- O'DELL, A. C. 122
The Scandinavian world. Longmans Green, 1957. pp.xvi,549, illus., diagrs., bibliog. 45s. *Geographies for advanced study, ed. by S. H. Beaver*.
After a brief historical and physical introduction some three hundred pages are devoted to the regional geography of the area, dealing with each country separately and including Finland. In the third part the economic geography is studied. C
- TAYLOR, T. G., ed. 123
Geography in the twentieth century: a study of growth, fields, techniques, aims and trends. 3rd ed. enl. N.Y., Philosophical Library; London, Methuen, 1957. pp.xi,674, plates, tables, diagrs., bibliog. 45s.
First published in 1951. A valuable textbook at the advanced level. It should be remembered that this is a book about geography for geographers rather than a book of geography for students. B

Publishers

THE FOLLOWING ABBREVIATIONS ARE USED IN ASLIB BOOK-LIST

A & U Allen & Unwin
 C & H Chapman and Hall
 CUP Cambridge University Press
 HMSO Her Majesty's Stationery Office
 McG-H McGraw-Hill
 O & B Oliver and Boyd
 OUP Oxford University Press
 ULP University of London Press

ERRATUM: Cancel entry 772, volume 22, no. 12, replaced by entry 106 in this issue.

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ASLIB BOOK-LIST VOL. 23 NO. 3 MARCH 1958

Preface

THE AIM of the Aslib Book-List is to provide a list of recommended recently published books in the fields of science and technology, agriculture, social science, education, industrial organization, architecture, building and documentation, and general reference works. Where possible a brief annotation is added to indicate the scope of the book or the reasons for its recommendation. Recommendations are normally restricted to books in the English language, but an exception may be made for an outstanding foreign work.

In compiling the list, Aslib relies on the recommendations made by a number of subject specialists and special librarians, and without their help and co-operation such a list would not be possible.

The entries are arranged by the Universal Decimal Classification and are further classified by the following symbols:

- A* Books suitable for general readers, or books treating the subject in an introductory, elementary, or general manner.
- B* Books of an intermediate degree of technicality or suitable as textbooks for students.
- *C* Books of an advanced or specially technical character.
- D* Directories, dictionaries, handbooks, lists and catalogues, encyclopaedias, year-books, and similar publications.

The regular transactions of societies are not included; nor are British Standard Specifications (except bound volumes). Any inquiry regarding the latter should be made direct to the B.S.I., 2 Park Street, London, W.1.

The place of publication is London, unless otherwise stated. The form of entry of references is based on British Standard Specification 1629 : 1950.

An index is issued with the last number of each volume.

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 Progress report in chemical literature retrieval: eds. G. L. Peakes, A. Kent, and J. W. Perry; based on symposia of the Division of Chemical Literature, American Chemical Society held in Minneapolis, 1955, and in Dallas, 1956. N.Y., London, Interscience, 1957. pp.xii,217. \$4.75 or 35s. *Advances in documentation and library science*, vol. 1. C
- TAUBE, M. *and others* 125
 The mechanization of data retrieval, by M. Taube and associates. [Washington], Documentation Incorporated, 1957. pp.vii,129. \$5. *Studies in co-ordinate indexing*, vol. 4. B

01 BIBLIOGRAPHY

- BRITISH union-catalogue of periodicals: a record of the periodicals of the world, from the seventeenth century to the present day, in British libraries; initiated by T. Besterman, ed. by J. D. Stewart with M. Hammond and E. Saenger. Vol. 4, S-Z. Butterworths, 1958. pp.xxxi,630. 190s. D 126
- HARPENDEN. Commonwealth Bureau of Soils 127
 Bibliography of soil science, fertilizers, and general agronomy, 1953-1956. Farnham Royal, Bucks, Commonwealth Agricultural Bureaux, 1957. pp.xxii, 661. 70s. D
- INTERNATIONAL COMMITTEE FOR SOCIAL SCIENCES DOCUMENTATION • 128
 Assistance to under-developed countries: an annotated bibliography; prep. by J. Viet. Paris, Unesco; [London, HMSO], 1957. pp.83. 5s. or 300 fr. *Reports and papers in the social sciences*, no. 8.
 Text in English and French. D
- INTERNATIONAL COMMITTEE FOR SOCIAL SCIENCES DOCUMENTATION 129
 A study of current bibliographies of national official publications: short guide and inventory; ed. J. Meyriat. Paris, Unesco; [London, HMSO], 1958. pp.260. 15s. or 900 fr. *Unesco bibliographical handbooks*, 7. D
- INTERNATIONAL COMMITTEE FOR SOCIAL SCIENCES DOCUMENTATION *and* INTER- 130
 NATIONAL CONGRESS OF ANTHROPOLOGICAL AND ETHNOLOGICAL SCIENCES
 International bibliography of social and cultural anthropology: ed. G. Ballandier and J. F. M. Middleton. Vol. 1; Works published in 1955. Paris, Unesco; [London, HMSO], 1958. pp.259. 27s. 6d. or 1,650 fr. D
- LIBRARY science abstracts: cumulative index to volumes 1-6, 1950-1955; comp. by H. A. Whatley and E. S. Whatley. Library Association, 1957. pp.viii,203. 40s. (30s. to members). D 131

UNITED STATES. Library of Congress. *General Reference and Bibliography Division* 132

North and Northeast Africa: a selected annotated list of writings, 1951-1957, comp. by H. F. Conover. Washington, the Library, 1957. pp.v,182, mimeographed. \$1.35. D

02 LIBRARIANSHIP

ASLIB

133

Proceedings of the International Study Conference on Classification for Information Retrieval held at Béatrice Webb House, Dorking, England, 13th-17th May 1957. London, Aslib; N.Y., Pergamon P., 1957. pp.iii,151. 30s. or \$5.50 (25s. or \$4.50 to members). C

CORBETT, E. V.

134

Photo-charging: its operation and installation in a British public library. James Clarke, 1957. pp.x,126, illus., plates, diagrs. 15s. B

ESDAILE, A.

135

National libraries of the world: their history, administration, and public services. 2nd ed. completely rev. by F. J. Hill. Library Association, 1957. pp.xv, 413, plates, tables. 44s. (33s. to members). B

RANGANATHAN, S. R.

136

Prolegomena to library classification. 2nd ed. Library Association, 1957. pp. 487, tables. 45s. (33s. to members). C

3 SOCIAL SCIENCES

33 ECONOMICS

ALLARDICE, C., ed.

137

Atomic power: an appraisal, including atomic energy in economic development. London, [etc.], Pergamon P., 1957. pp.151, plates, tables, diagrs. 21s. or \$3.50. *International series of monographs on the economic aspects of nuclear energy, ed. by C. Allardice and others, vol. 1.*

Based on the informal panel discussion of the 11th Annual Meeting of the Board of Governors of the International Bank for Reconstruction and Development. A

ECONOMIST. Intelligence unit

138

Britain and Europe: a study of the effects on British manufacturing industry of a free trade area and the common market. The Unit, 1957. pp.xv,304, tables, diagrs. 15s. B

JONES, L.

139

Shipbuilding in Britain, mainly between the two World Wars. Cardiff, Wales U.P., 1957. pp.[7],244, tables, diagrs. 30s.

An economic review of the industry, its growth and development.

A-C

WILLIAMS, G.

140

Recruitment to skilled trades. London, Routledge & K. Paul; N.Y., Humanities P., 1957. pp.vii,216, tables. 23s. *International library of sociology and social reconstruction; ed. W. J. H. Sprott.* B

331 Industrial relations

- BROWN, J. D. and HARBISON, F. 141
 High-talent manpower for science and industry: an appraisal of policy at home and abroad. Princeton, N.J., Princeton University Industrial Relations Section, 1957. pp.95. \$3. *Research report series, no. 95.* B
- ORGANISATION FOR EUROPEAN ECONOMIC CO-OPERATION 142
 The problem of scientific and technical manpower in Western Europe, Canada, and the United States. Paris, O.E.E.C., [1957]. pp.220, tables, diagrs. 10s. or 500 fr. B

37 EDUCATION

- TYLECOTE, M. 143
 The Mechanics' Institutes of Lancashire and Yorkshire before 1851. Manchester, Manchester U.P., 1957. pp.x,346, illus., plates, diagrs. 37s. 6d.
 The first detailed survey to be made of mechanics' institutes. C

5 NATURAL SCIENCES

52 ASTRONOMY

- BROWN, R. H. and LOVELL, A. C. B. 144
 The exploration of space by radio. C & H, 1957. pp.xii,207, plates, diagrs. 35s.
 A valuable summary of developments in this new and important science. A-B
- GALILEI, GALILEO 145
 Dialogue on the great world systems. Tr. by T. Salusbury, revised and annotated with an introduction by G. de Santillana. Chicago, Chicago U.P., 1953; London, CUP, 1957. pp.viii,506, diagrs. \$12.50 or 94s.
 One of the great books in the history of science, comparing the Ptolemaic and Copernican systems, and the cause of Galileo's troubles with the Inquisition. Prof. de Santillana has vastly improved the original (1661) translation of Salusbury. C
- KOYRÉ, A. 146
 From the closed world to the infinite universe. Baltimore, John Hopkins P.; London, OUP, 1957. pp.xii,313, diagrs. 40s. *John Hopkins. Institute of the History of Medicine. 3rd series: Hideyo Noguchi lectures, vol. 7.*
 The development of cosmology from the medieval world picture to the Newtonian system. C
- MALONEY, T. 147
 Other worlds in space. Acorn P., 1957. pp.128, plates, tables, diagrs. 12s. 6d.
 Instruments and observational methods are discussed, and useful information provided for the would-be amateur astronomer. A

53 PHYSICS

- PIPPARD, A. B. 148
 Elements of classical thermodynamics for advanced students of physics. CUP, 1957. pp.vii,165, diagrs. 25s.
 Discusses the law of increase of entropy in some detail. B-C

539.1 Atomic energy

SERIES, G. W.

149

The spectrum of atomic hydrogen. OUP, 1957. pp.viii,88, tables, diags., bibliog. 8s. 6d. *Oxford library of the physical sciences*, eds. B. Bleaney, M. H. L. Pryce, F. C. Frank, D. H. Wilkinson.

A very useful summary of theoretical developments in this field. Should be readily intelligible to the non-specialist who has the necessary mathematical equipment. C

54 CHEMISTRY

ATACK, F. W., ed.

150

Handbook of chemical data. Associate ed. D. R. Atack. Altrincham (Ches.), Sherratt, 1957. pp.viii,692, tables. 36s. D

FIESER, L. F.

151

Experiments in organic chemistry. 3rd ed., rev. Boston (Mass.), Heath; [London, Harrap], 1957. pp.[7],360, plates, tables, diags. \$5.55 or 38s.

Previous ed. 1956 listed in *Aslib Book-List* Nov. 1956. Has quite a different format from previous editions but remains first-class. B

SIMONSEN, J. and ROSS, W. C. J.

152

The terpenes. Vol. V: The triterpenes and their derivatives, hydroxy acids, hydroxy lactones, hydroxyaldehyde acids, hydroxyketo acids and the stereochemistry of the triterpenes: with addenda to Vol. III by J. Simonsen and P. de Mayo. CUP, 1957. pp.ix,662, diags. 84s.

Vol. IV listed in *Aslib Book-List* Sept. 1957. A stimulating conclusion to a work of universally acknowledged scholarship. C

55 GEOLOGY

HUTCHINSON, G. E.

153

A treatise on limnology. Vol. 1: Geography, physics and chemistry. N.Y., Wiley; London, C & H, 1957. pp.xiv,1015, tables, diags., bibliog. \$19.50 or 156s.

A very detailed and immensely comprehensive work of the greatest value to limnologists, useful to geologists, oceanographers, and biologists. C

550.3 Geophysics

BATES, D. R., ed.

154

The planet earth. London, N.Y., Pergamon P., 1957. pp.312, plates, tables, diags., bibliog. 35s. or \$5.50.

Planned to satisfy the increased interest in geophysical phenomena. Of considerable interest to professional scientists from many fields. Topics dealt with include the geomagnetic field, the nature of the earth's crust and interior, the ionosphere, airflow, the aurora, meteors, and cosmic radiation. B-C

551.5 Meteorology

CONFERENCE ON CHEMICAL AERONOMY

155

The threshold of space: the proceedings of the Conference on Chemical Aeronomy, Cambridge, Mass., 25th-28th June 1956; ed. by M. Zelikoff, London, Symposium Division Pergamon P., 1957. pp.xi,342, illus., tables, diags., bibliog. \$15 or 105s.

Sponsored by Geophysics Research Directorate, Cambridge, Mass. Co-ordinated by Wentworth Institute. Of considerable interest and value to those concerned with the study of the upper atmosphere. C

57 BIOLOGY

577.1 Biochemistry

- DAVIDSON, J. N. 156
The biochemistry of the nucleic acids. 3rd ed., London, Methuen: N.Y., Wiley, 1957. pp.viii,248, plates, tables, diagrs., bibliog. 21s. *Methuen's monographs on biochemical subjects*, eds.: R. Peters and F. G. Young.
First ed. 1950. A most excellent elementary guide to the nucleic acids and nucleoproteins. Maintains the high standard of previous editions. B-C

59 ZOOLOGY

- DALCQ, A. M. 157
Introduction to general embryology, tr. [from the French] by J. Medawar. OUP, 1957. pp.vii,177, plate, diagrs., bibliog. 25s.
Originally published as *Initiation à l'embryologie générale*. Liège, Desoer, 1952. Sets out the whole course of embryological theory and research starting in the 1880s. Students of the biological sciences should find it very useful. B
PANTELOURIS, E. M. 158
A handbook of animal physiology. Baillière Tindall & Cox, 1957. pp.viii,255, illus., tables, diagrs., bibliog. 25s.
Textbook for veterinary students. B
PRINGLE, J. W. S. 159
Insect flight. CUP, 1957. pp.viii,133, tables, diagrs., bibliog. 15s. *Cambridge monographs in experimental biology*, ed. by G. Salt, no. 9.
Reviews the present state of knowledge of insect flight in the light of rapid development in methods of experimental analysis in recent years. B
SNYDER, L. L. 160
Arctic birds of Canada: illustrations by T. M. Shortt. Toronto, University of Toronto P., London, OUP, 1957. pp.x,310, illus., bibliog. \$4.75 or 38s. A-B

6 APPLIED SCIENCES

615 Pharmacy

- JENKINS, G. L. and others 161
The chemistry of organic medicinal products. 4th ed., by G. L. Jenkins, W. H. Hartung, K. E. Hamlin, Jr, and J. B. Data. N.Y., Wiley; London, C & H, 1957. pp.x,569, tables, diagrs. \$10.75 or 86s.
Previous ed. 1949. Very well produced and should be of considerable value to all requiring information on medicinal chemistry. B

62 ENGINEERING

621 Mechanical engineering

- MURPHY, G. J. 162
Basic automatic control theory. Princeton (N.J.); London [etc.], Van Nostrand, 1957. pp.xi,557, diagrs. \$9 or 67s. 6d. *The Van Nostrand series in electronics and communications*, ed. by H. J. Reich.
One of the most comprehensive and up-to-date books so far published on the theory and practice of automatic control systems. The analysis and synthesis of linear systems is described in some detail and practical illustrations included. C

STEPANOFF, A. J. 163

Centrifugal and axial flow pumps: theory, design, and application. 2nd ed. N.Y., Wiley; London, C & H, 1957. pp.vii,462, illus., tables, diags. \$12 or 96s.

A valuable reference book for those industries concerned with the manufacture or use of these pumps. B

621.3 Electrical engineering

VINYCOMB, T. B. 164

Electricity today. 2nd ed. rev. by F. J. M. Laver. OUP, 1957. pp.192, plates, diags. 12s. 6d. *Pageant of progress series, no. 9*

Previous ed. 1939. Reads well, and is a good introduction to the subject. A

WELLMAN, W. R. 165

Elementary industrial electronics. 2nd ed. Princeton (N.J.); London, [etc.]; Van Nostrand, 1957. pp.vii,455, illus., diags. \$4.32 or 32s.

Previous ed. 1948. Contains an elementary exposition of the principles of electronics for students and maintenance engineers who are concerned with industrial control and instrumentation. B

626 Hydraulic engineering

LELIAVSKY, S. 166

Irrigation and hydraulic design. Vol. 2: Irrigation works. C & H, 1957. pp.xvi, 864, plates, tables, diags. 294s.

Vol. 1 listed in *Aslib Book-List* May 1955. The hydraulic theory expounded in the first volume is used here as a background to develop specific design procedures. B

629 Transport engineering

ROCARD, Y. 167

Dynamic instability: automobiles, aircraft, suspension bridges, tr. from the French by M. L. Meyer. Crosby Lockwood, 1957. pp.xi,227, plates, diags. 45s.

Originally published as *L'instabilité en mécanique*. Paris, Masson, 1954. The topics chosen are treated in an original manner and are of undoubted interest to research workers and practising engineers. B

629.12 Ships and shipbuilding

PHILLIPS-BIRT, D. 168

The naval architecture of small craft. Hutchinson, 1957. pp.xvi,352, illus., tables, diags., bibliog. 35s.

Emphasis is placed on the special aspects of design. More for the practising naval architect than the student. C

629.19 Astronautics

BEARD, R. B. and ROTHERHAM, A. C. 169

Space flight and satellite vehicles. Newnes, 1957. pp.150, plates, tables, diags., bibliog. 15s.

The purpose is to present facts, probabilities, and possibilities in such a way that they are clearly distinguishable. Gives details of the first Russian satellite launching and description of the progress of the American 'Vanguard'. A

- LEY, W. 170
 Rockets, missiles, and space travel. Rev. and enl. ed. C & H, 1957. pp.xv,528, illus., tables, diagrs., bibliog. 50s.
 Latest ed. of a book first published in 1944 under the title of *Rockets*. Has a good bibliography. B

63 AGRICULTURE

637 Dairying

- HAMMER, B. W. and BABEL, F. J. 171
 Dairy bacteriology. 4th ed. N.Y., Wiley; London, C & H, 1957. pp.ix,614, illus., tables, bibliog. \$9 or 72s.
 Previous ed. 1948. Extensive revision has been undertaken to include subjects of increased importance to dairy scientists and technologists. C

64 CATERING

- NEW, J. G. 172
 Office and works catering. Business Publications Ltd in association with Batsford, 1957. pp.xii,175, plates, tables. 18s.
 Amongst topics covered are canteen and kitchen planning, equipping and furnishing, cleaning and maintenance of equipment, menu planning, food buying and storage, hygiene and safety precautions, costing and legal and personnel matters. B

65 COMMUNICATIONS, COMMERCE, and ORGANIZATION

651/652 Office management

- CANNING, R. G. 173
 Installing electronic data processing systems. N.Y., Wiley; London, C & H, 1957. pp.x,193, tables, diagrs., bibliog. \$6 or 48s.
 Assuming no specialized knowledge of computers, it will be of interest to business management in process of installing a system. C

- OFFICE MANAGEMENT ASSOCIATION 174
 Electronics in the office: the practical application of electronic computers and data processing machines to clerical work. The Association, 1957. pp.[7],132, illus., tables, diagrs. 21s. (13s. to members). B

657 Accountancy

- BIGG, W. W. 175
 Cost accounts. 7th ed. rev. and enl. Macdonald & Evans, 1957. pp.xiii,328, illus., tables, diagrs. 18s.
 First published 1932. Previous ed. 1950. Still a substantial textbook for candidates for the chief accountancy examinations. Clear analysis of current developments makes it a good desk-book for company accountants. A-B

658 Industrial management

- DENNETT, H. 176
 Unit stock and store control. Business Publications in association with Batsford, 1957. pp.xi,194, illus., bibliog. 25s.
 A most comprehensive book on the problems of unit stock control in both manufacturing and distributive concerns. B

659 Publicity. Information

- CHISHOLM, C., *ed.* 177
Communication in industry. Rev. ed. Business Publications in association with Batsford, 1957. pp.xi,314, illus., plates, diags. 35s. B

66 CHEMICAL TECHNOLOGY

- EMMETT, P. H., *ed.* 178
Catalyses. Vol. V: Hydrogenation, oxo-synthesis, hydrocracking, hydrodesulfurization, hydrogen isotope exchange and related catalytic reactions. N.Y., Reinhold; London, C & H, 1957. pp.vi,542, tables, diags., bibliog. \$15 or 120s.
Vol. IV listed in *Aslib Book-List* Nov. 1956. The standard of articles is authoritative and high as is also the presentation. C
- WEBER, H. C. and MEISSNER, H. P. 179
Thermodynamics for chemical engineers. 2nd ed. N.Y., Wiley; London, C & H, 1957. pp.507, tables, diags. \$8.50 or 68s.
Explains most succinctly those details which puzzle students when they first learn thermodynamics, e.g. the difference between equilibrium states and steady states. B

664 Food industries

- TRESSLER, D. K. and EVERS, C. F. 180
The freezing preparations of foods. 3rd ed. rev. and enl. Westport, Conn., The Avi Publishing Co., 1957. 2v.
Vol. 1: Fresh foods. pp.544, illus. \$18. Vol. 2: Cooked and prepared foods. pp.670. \$10. B

67/68 MANUFACTURES

677 Textiles

- MONCRIEFF, R. W. 181
Man-made fibres. 3rd ed. National Trade P., 1957. pp.x,661, illus., tables, diags., bibliog. 65s.
First published as *Artificial fibres* in 1950. Well documented with references to the original literature and with new chapters covering specific cellulose derivatives and the newer fully synthetic fibres. B

681 Fine mechanisms

- ARMOUR RESEARCH FOUNDATION, *Chicago* 182
Proceedings of the second annual computer applications symposium, October 24-25, 1955. Chicago, the Foundation, 1957. pp.108, tables, diags. \$3. B
- FRANKLIN INSTITUTE, *Philadelphia* 183
Automatic coding: proceedings of the symposium held January 24-25, 1957, at the Franklin Institute in Philadelphia. Lancaster, Pa., Journal of the Franklin Institute, 1957. pp.vii,118, illus., tables, diags. \$3. *Monograph* 3. C
- HODGSON, D. and BULLEN, H. J. 184
How to use a tape recorder in your business . . . in your home. N.Y., Hastings House; Toronto, Saunders, 1957. pp.xiii,216, illus., plates, diags. \$4.95. *Communication arts books.* A

Publishers

THE FOLLOWING ABBREVIATIONS ARE USED IN ASLIB BOOK-LIST

A & U	Allen & Unwin
C & H	Chapman and Hall
CUP	Cambridge University Press
HMSO	Her Majesty's Stationery Office
McG-H	McGraw-Hill
O & B	Oliver and Boyd
OUP	Oxford University Press
ULP	University of London Press

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ASLIB BOOK-LIST VOL. 23 NO. 4 APRIL 1958

Preface

THE AIM of the Aslib Book-List is to provide a list of recommended recently published books in the fields of science and technology, agriculture, social science, education, industrial organization, architecture, building and documentation, and general reference works. Where possible a brief annotation is added to indicate the scope of the book or the reasons for its recommendation. Recommendations are normally restricted to books in the English language, but an exception may be made for an outstanding foreign work..

In compiling the list, Aslib relies on the recommendations made by a number of subject specialists and special librarians, and without their help and co-operation such a list would not be possible.

The entries are arranged by the Universal Decimal Classification and are further classified by the following symbols:

- A Books suitable for general readers, or books treating the subject in an introductory, elementary, or general manner.
- B Books of an intermediate degree of technicality or suitable as textbooks for students.
- C Books of an advanced or specially technical character.
- D Directories, dictionaries, handbooks, lists and catalogues, encyclopaedias, year-books, and similar publications.

The regular transactions of societies are not included; nor are British Standard Specifications (except bound volumes). Any inquiry regarding the latter should be made direct to the B.S.I., 2 Park Street, London, W.1.

The place of publication is London, unless otherwise stated. The form of entry of references is based on British Standard Specification 1629 : 1950.

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001 GENERAL KNOWLEDGE

- SOUTHER, J. W. 185
Technical report writing. N.Y., Wiley; London, C & H, 1957. pp.xi,70, diags.
\$2.95 or 24s. B

06 SOCIETIES and INSTITUTIONS

- COUNCIL FOR INTERNATIONAL ORGANIZATIONS OF MEDICAL SCIENCES 186
The planning of international meetings. Oxford, Blackwell, 1957. pp.113. 7s. 6d.
B

3 SOCIAL SCIENCES

- PIDDINGTON, R. 187
An introduction to social anthropology. Vol. 2. Edinburgh, London, O & B,
1957. pp.xvi,443-819, plate, bibliog. 30s. A-B

301 Sociology

- BAILEY, F. G. 188
Caste and the economic frontier: a village in highland Orissa. Manchester,
Manchester U.P., 1957. pp.xvi,292, plates, tables. 35s. B
- TURNER, V. W. 189
Schism and continuity in African society: a study of Ndembu village life. Man-
chester, published on behalf of the Rhodes-Livingstone Institute, Northern
Rhodesia, by Manchester U.P., 1957. pp.xxiv,348, plates, tables, diags.,
bibliog. 35s. B

31 STATISTICS

- CONNOLLY, T. G. and SLUCKIN, W. 190
An introduction to statistics for the social sciences. 2nd ed. enl. Cleaver-Hume,
1958. pp.vii,166, tables, diags. 16s.
First ed. 1953. With new chapter on analysis of variance. B

33 ECONOMICS

331 Industrial relations

- WOMEN'S ENGINEERING SOCIETY 191
Report on conference 'Careers for girls in engineering', held at the City of
Coventry Training College on 13th/14th July, 1957. The Society, [1957]. pp.xi,
74, plates. 15s. A

36 WELFARE and INSURANCE

368 Insurance

- COCKERELL, H. A. L. 192
Insurance. English Universities P., 1958. pp.x,210, bibliog. 6s. *Teach yourself*
books, ed. by L. Cutts.
An introduction for the layman and intelligent newcomer. A

- PROCTOR, R. H. 193
Engineering insurance: its principles and practice. Pitman, 1957. pp.xiii,247, illus., tables, diagrs. 30s. *Chartered Insurance Institute. Insurance handbooks no. 11.*

The only up-to-date English textbook on this subject. Contains technical descriptions of machinery for the use of insurance students, and an account of insurance practice. B

37 EDUCATION

- ASH, B. and RAPAPORT, B. 194
Creative work in the junior school. Methuen, 1957. pp.157, illus., plates, bibliog. 15s.

A practical book on activity in language, craft, music, etc. A-B

- KOROL, A. G. 195
Soviet education for science and technology. Cambridge (Mass.), Massachusetts Institute of Technology; N.Y., Wiley; London, C & H, 1957. pp.xxvii,513, tables, bibliog. \$8.50 or 68s.

An informative book for the educationist but likely to be misunderstood by the general reader looking for political ammunition. C

- STANDING, E. M. 196
Maria Montessori: her life and work. Hollis & Carter, 1957. pp.xiv,354, plates. 21s.

Lays special emphasis on the author's contributions to child study. A

38 TRADE

- HARROD, R. F. 197
International economics. Rev. ed. London, Nisbet, CUP, 1957. pp.xiii,186, tables. 8s. 6d. *Cambridge economic handbooks, ed. by C. W. Guillebaud, M. Friedman.*
Previous ed. 1939. B

5 NATURAL SCIENCES

- DE SANTILLANA, G. 198
The crime of Galileo. London, Toronto, [etc.]. Heinemann, 1958. pp.xvi,338, plates, diagrs., bibliog. 30s.
A fair and penetrating account of Galileo's battle for freedom of thought and his trial by the authorities. A

51 MATHEMATICS

- SCOTT, J. F. 199
A history of mathematics from antiquity to the beginning of the nineteenth century; foreword by H. W. Turnbull. Taylor & Francis, 1958. pp.[14],266, plates, tables, diagrs. 63s.
Based largely on extracts from the original works. C

53 PHYSICS

- BURRIS-MEYER, H. and GOODFRIEND, L. S. 200
Acoustics for the architect. N.Y., Reinhold; [London, C & H], 1957. pp.126, illus., tables, diagrs., bibliog. \$10 or 80s.
The principles of acoustics and acoustical design to enable the architect to deal with non-specialist requirements. B

ASLIB BOOK-LIST

- JOOS, G. and FREEMAN, I. M. 201
Theoretical physics by G. Joos with the collaboration of I. M. Freeman. 3rd ed. Blackie, 1958. pp.xxiii,885, plates, diags., bibliog. 70s.
Previous ed. 1951. This well-known textbook is even more useful than its previous editions. C

- LECK, J. H. 202
Pressure measurement in vacuum systems. Published on behalf of the Institute of Physics by C & H, 1957. pp.144, diags., bibliog. 30s. *Physics in industry series*.
A thorough but compressed survey of the methods employed in this now vital field of physical technique. C

539.1 Atomic Energy

- PICKARD, J. K., ed. 203
Nuclear power reactors. Princeton (N.J.); London [etc.], Van Nostrand, 1957. pp.xii,388, illus., tables, diags., bibliog. \$8.50 or 64s. *Geneva series on the peaceful uses of atomic energy*, ed. by J. G. Beckerley.
The important papers presented at the 1955 Geneva Conference. C

54 CHEMISTRY

- ADAMS, R., ed. 204
Organic reactions. Vol. IX. N.Y., Wiley; London, C & H, 1957. pp.viii,468, tables, diags., bibliog. \$12 or 96s.
The standard and usefulness of this new volume in a most valuable series are well up to expectations. C

- FOX, S. W. and FOSTER, J. F. 205
Introduction to protein chemistry. N.Y., Wiley; London, C & H, 1957. pp.viii, 459, illus., tables, diags., bibliog. \$9.50 or 76s.
An adequate, interestingly presented, and much needed book. Full preparatory accounts of the amino acids and the peptides. C

- LOVERN, J. A. 206
The chemistry of lipids of biochemical significance. 2nd ed. rev. London, Methuen; N.Y., Wiley, 1957. pp.xiii,157, tables, diags., bibliog. 12s. 6d. *Mono-graphs on biochemical subjects*, ed. by R. Peters and F. G. Young.
Previous ed. 1955. Satisfactory in all respects and can be confidently recommended. B-C

- SHOPPEE, C. W. 207
Chemistry of the steroids. London, Butterworths; N.Y., Academic P., 1958. pp.vii,314, tables, diags., bibliog. 50s. or \$9. *Organic chemistry monographs*, eds. J. W. Cook and M. Stacey.
First major work on the steroids since 1953. Covers research up to the end of 1955 and some important work of 1956. C

- THOMSON, R. H. 208
Naturally occurring quinones. London, Butterworths; N.Y., Academic P., 1957. pp.vii,302, diags., bibliog. 50s. or \$9. *Organic chemistry monographs*, eds. J. W. Cook and M. Stacey.
Planned to be of value chiefly to those concerned with colouring matters although it has much of interest to organic and biochemists. A well-written, documented, and indexed book of real value. C

- WALLING, C. 209
Free radicals in solution. N.Y., Wiley; London, C & H, 1957. pp.xii,631, tables, diags. \$14.50 or 116s.

The properties, production, and reactions of free radicals in solution are discussed with special emphasis on vinyl polymerization, addition reactions, halogen substitutions, and antioxidations. B

- WELCHER, F. J. 210
The analytical uses of ethylenediaminetetraacetic acid. Princeton (N.J.); London [etc.], Van Nostrand, 1958. pp.xvii,366, tables, diags., bibliog. \$8.50 or 64s.

A comprehensive literature survey of the analytical use of this very versatile and valuable reagent, drawn from almost 1000 original references. B

55 GEOLOGY

551.5 Meteorology

- KENDREW, W. G. 211
Climatology treated mainly in relation to distribution in time and place. 2nd ed. Oxford, Clarendon P., 1957. pp.xv,400, plates, tables, diags., bibliog. 42s.

Previous ed. 1949. Entirely reset. Major additions mostly deal with the higher troposphere, viz. jet stream. B-C

- NORTH ATLANTIC TREATY ORGANIZATION. Symposium on the Polar Atmosphere, 1956. 212

Polar atmosphere symposium: part II, Ionospheric section, Symposium at Oslo, 2-8 July 1956. Ed. secretary: L. Harang. Published for the Advisory Group for Aeronautical Research and Development, DATO, by Pergamon P., 1957. pp.xiii,212, plates, diags., bibliog. 60s. or \$10.50. *Agardograph 29 part 2*.

Much of interest on ionosphere movement and turbulence, prognostic techniques, and absorption. C

59 ZOOLOGY

- POLYAK, S. 213
The vertebrate visual system: its origin, structure, and function and its manifestations in disease, with an analysis of its role in the life of animals and in the origin of man; preceded by a historical review of investigations of the eye, and of the visual pathways and centers of the brain; ed. by H. Klüver. Chicago, Chicago U.P.; [London, CUP], 1957. pp.xviii,1390, illus., plates, diags., bibliog. \$45 or 337s. 6d. *Chicago University. Committee on publications in biology and medicine. Publications*. C

- UNIVERSITIES FEDERATION FOR ANIMAL WELFARE 214

The UFAW handbook on the care and management of laboratory animals, joint eds.: A. N. Worden, W. Lane-Petter, with a foreword by H. Himsworth. 2nd ed. enl. UFAW, 1957. pp.xix,951, illus., tables, diags., bibliog. 70s.

Previous ed. 1947. Obtainable from UFAW, 7a Lamb's Conduit Passage, London, W.C.1. B

6 APPLIED SCIENCES

614 Public health

- CLAY, H. H. and WILLIAMS, R. 215
The public health inspector's handbook: a manual for public health officers. 9th ed. (completely rev.). H. K. Lewis, 1957. pp.xx,614, tables, diags. 40s.
Previous ed. 1954. C

- MCCULLOUGH, C. R., ed. 216
 Safety aspects of nuclear reactors. Princeton (N.J.); London [etc.], Van Nostrand, 1957. pp.xii,237, illus., tables, diags., bibliog. \$8.50 or 64s. *Geneva series on the peaceful uses of atomic energy*, ed. by J. G. Beckerley.
 Selection of papers, given at the Geneva Conference in 1955, on radiation hazards and safety standards. C

- SAX, N. I. 217
 Dangerous properties of industrial materials. A completely rev. and enl. ed. of 'Handbook of dangerous materials'. N.Y., Reinhold; London, C & H, 1957. pp.1467, tables. \$22.50 or 180s.
 Detailed information on the toxicity, inflammability, and explosivity of 8500 potentially dangerous materials, with notes on other specific hazards. D

62 ENGINEERING

- JUDGE, A. W. 218
 Engineering precision measurements. 3rd ed. rev. C & H, 1957. pp.vii,447, illus., tables, diags. 65s.
 First published 1944, 2nd ed. 1950. New matter covers slip gauges, the measurement of straightness and flatness, interferometry, surface finish, and automatic gauging. B

621.3 Electrical engineering

- BANNER, E. W. 219
 Electronic measuring instruments. 2nd ed. rev. C & H, 1958. pp.xvi,496, illus., tables, diags., bibliog. 56s.
 Previous ed. 1954. Surveys a wide range of electronic measuring instruments and devices including radiation detectors and counters. B

- BROWN, J. G. 220
 Hydro-electric engineering practice. Blackie, 1958. 3v.
 Vol. I: Civil engineering. pp.xxvii,1189, illus., tables, diags., bibliog. 189s. Vol. II: Mechanical and electrical engineering. Co-ordinating ed. P. L. Blackstone. pp.xxii,740, illus., diags., bibliog. 126s. Vol. III: Economics, operation and maintenance. Co-ordinating ed. J. K. Hunter. pp.xxiv,473, illus., tables, diags., bibliog. 84s. A very important new work on hydro-power engineering largely compiled by a group of practising engineers; covers the latest design and practice in water power. C

621.4 Internal combustion and heat engines

- PENNER, S. S. 221
 Chemistry problems in jet propulsion. London, N.Y. [etc.], Pergamon P., 1957. pp.xiv,394, tables, diags. 90s. or \$12.50. *International series of monographs on aeronautical sciences and controlled flight. Division III: Propulsion systems including fuels*. Eds. E. R. Sharp and A. D. Baxter. Vol. 1.
 Theoretical treatment of chemical and thermodynamical problems of combustion in jet and rocket motors. C

629 Transport engineering

629.12 Ships and shipbuilding

- BARNARD, P. N. 222
 Engines for small power craft. Newnes, 1958. pp.viii,215, illus., diags. 16s.
 An amateur's guide to the characteristics, installation, and operation of engines up to 60 b.h.p. B

ASLIB BOOK-LIST

629.19 Astronautics:

- GATLAND, K. W., *ed.* 223
 Project satellite. Wingate, 1958. pp.ix,167, plates, tables, diagrs. 21s.
 A historical account for the general reader. A

63 AGRICULTURE

- BLACK, C. A., 224
 Soil-plant relationships. N.Y., Wiley; London, C & H, 1957. pp.vi,332, tables, diagrs., bibliog. \$7 or 56s.
 Based on a course of lectures at the State College, Iowa. Very complete, covering all aspects of plant growth in relation to soil conditions. B
- JACOB, A., 225
 Magnesium: the fifth major plant nutrient, tr. from the German by N. Walker.
 • Staples R., 1958. pp.xii,159, plates, tables, diagrs., bibliog. 40s.
 Originally published as *Magnesia, der fünfte Pflanzenhauptnährstoff*. Stuttgart, Enke, 1955.
 The first book adequately to acknowledge magnesium as a likely limiting factor in crop production. B-C

636 Stock

- FRASER, A. and STAMP, J. T. 226
 Sheep husbandry and diseases. 3rd ed. rev. with new section. Crosby Lockwood, 1957. pp.xii,446, illus., plates, tables, diagrs. 35s.
 • Previous ed. 1951. B

65 COMMUNICATIONS, COMMERCE, and ORGANIZATION

651/652 Office management

- WILLIAMS, R. H. 227
 The electronic office. 2nd ed. Gee & Co., 1958. pp.80, plates, tables, diagrs. 17s. 6d.
 Previous ed. 1955. A

657 Accountancy

- BROAD, H. W. and CARMICHAEL, K. S. 228
 A guide to management accounting. H.F.L. (Publishers), 1957. pp.viii,152, illus., tables, diagrs. 18s. A-B

658 Industrial management

- BARNES, R. M. 229
 Work sampling. 2nd ed. N.Y., Wiley; London, C & H, 1957. pp.x,283, illus., tables, diagrs., bibliog. \$7.95 or 64s.
 Previous ed. 1956. A-B
- JEWKES, J. and others 230
 The sources of invention, by J. Jewkes, D. Sawyers, R. Stillerman. London [etc.], Macmillan; N.Y., St Martin's P., 1958. pp.xii,428, tables, bibliog. 31s. 6d. or \$6.75.
 Brings together a body of factual information on the conditions under which inventions are made today. The second half is a collection of case histories of modern inventions. A

66 CHEMICAL TECHNOLOGY

- FAITH, W. L. and others 231
 Industrial chemicals, [by] W. L. Faith, D. B. Keyes, R. L. Clark. 2nd ed. N.Y., Wiley; London, C & H, 1957. pp.ix,844, diagrs. \$16 or 128s.
 Well-arranged, clear, and one of the most adequate general guides of its type. D

67/68 MANUFACTURES

676 Paper

- HUNTER, D. 232
Papermaking: the history and technique of an ancient craft. 2nd ed. rev. and enl. Cresset P., 1957. pp.xxiv,611,xxxvii, illus., plates, tables, diagrs. 84s. B

678 Rubber

- FISHER, H. L. 233
Chemistry of natural and synthetic rubbers. N.Y., Reinhold; London, C & H, 1957. pp.vii,208, illus., diagrs. \$6.50 or 52s.
Recommended for L.I.R.I. level students. B

- NORMAN, R. H. 234
Conductive rubber: its production, application, and test methods. Maclaren, 1957. pp.[3],99, tables, diagrs., bibliog. 16s. C

235
RUBBER trade directory of Great Britain: a comprehensive, fully classified guide to all sections of the industry and to suppliers of all raw materials (including chemicals and textiles), laboratory and other equipment, machinery, and ancillary products used by manufacturers of rubber goods. 3rd ed. Maclaren, 1957. pp.748, bibliog. 84s.

First ed. 1950.

678.5 Plastics

- KRESSER, T. O. J. 236
Polyethylene. N.Y., Reinhold; London, C & H, 1957. pp.xi,217, illus., tables, diagrs. \$4.95 or 40s. *Reinhold plastics applications series, no. 1.*
The properties are fully described and the applications (agricultural, horticultural, in building, and in engineering) are presented in a way likely to suggest further uses. B

- SIMONDS, H. R. 237
A concise guide to plastics. N.Y., Reinhold; London, C & H, 1957. pp.xi,381, illus., tables, diagrs. \$6.95 or 56s.
Intended for those who are not familiar with, but might want to use, plastics. D

681 Fine mechanisms

- CHAPIN, N. 238
An introduction to automatic computers. Princeton (N.J.), London [etc.], Van Nostrand, 1957. pp.viii,525, illus., tables, diagrs., bibliog. \$6.75 or 51s.
Written in an almost non-technical language and is intended for company executives contemplating modernization of office work. A-B

- MOLLOY, E., ed. 239
High fidelity sound reproduction, with an introduction by H. J. Leak. Newnes, 1958. pp.xii,200, illus., tables, diagrs. 20s.
A comprehensive and up-to-date summary, at an intermediate level, of the whole field of sound reproduction. B

- RICHARDS, R. K. 240
Digital computer components and circuits. Princeton (N.J.), London [etc.], Van Nostrand, 1957. pp.vii,511, diagrs., bibliog. \$8.50 or 64s.
Treats the subject in great detail; primarily intended for engineers who need an introduction to the subject. B

69 BUILDING

- BRIMELOW, E. I. 241
Aluminium in building. Macdonald, 1957. pp.378, illus., tables, diagrs., bibliog. 42s.
An extremely informative and competent review of the development and uses of aluminium in building. B
- CARRAN, E. 242
The foreman's manual: a guide to building supervision; with 142 line diagrams drawn by the author. Crosby Lockwood, 1957. pp.222, illus., diagrs. 15s.
Covers every aspect of the foreman's work from the staking out of the site to the compilation of the final accounts. B
- MEDLYCOTT, A. 243
Applied building construction: a first year course. C & H, 1957. pp.vii,136, diagrs. 25s.
More useful for students than practising architects. B
- SPECIFICATION: the standard reference book for architects, surveyors, and municipal engineers, 1958, ed. by F. R. S. Yorke. Architectural P., 1957. pp.1403, illus., tables, diagrs. 35s. D

7 FINE ARTS

77 PHOTOGRAPHY

- BOMBACK, E. S. 245
Photography in colour with Kodak films. Fountain P., 1957. pp.112, illus., tables. 15s.
By an accepted authority on colour photography. Authoritative technical data on the materials described. A
- JENKINS, P. 246
Colour separation negatives. Focal P., 1957. pp.272, illus., tables, diagrs. 42s.
Manual of photo-technique.
Complete guide to making separation negatives for those systems of colour photography requiring the making of separate monochrome prints. B

9 HISTORY-GEOGRAPHY

91 GEOGRAPHY

- BOWEN, E. G., ed. 247
Wales: a physical, historical and regional geography. Methuen, 1957. pp.528, tables, diagrs., bibliog. 42s.
This excellent work, especially in its regional studies, gives repeated evidence of very close and successful research collaboration. C
- 930.26 Archaeology
- CLARK, J. and GRAHAME, D. 248
Archaeology and society: reconstructing the prehistoric past. 3rd ed., rev. and reset. Methuen, 1957. pp.264, illus., plates, tables, diagrs. 25s.
Previous ed. 1947. Good introductory textbook on archaeology. A-B

Publishers

THE FOLLOWING ABBREVIATIONS ARE USED IN ASLIB BOOK-LIST

A & U Allen & Unwin
C & H Chapman and Hall
CUP Cambridge University Press
HMSO Her Majesty's Stationery Office
McG-H McGraw-Hill
O & B Oliver and Boyd
OUP Oxford University Press
ULP University of London Press

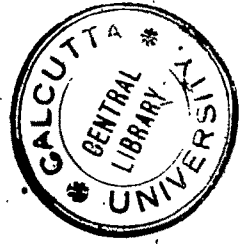
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Current British directories: a comprehensive guide to the local, trade and professional directories of the British Isles, 3rd ed. Jones & Evans' Bookshop, 1958. pp.xiv,273, mimeographed. 30s. D
- LIBRARY ASSOCIATION 250
Five years' work in librarianship, 1951-1955. Ed. by P. H. Sewell. Library Association, 1958. pp.viii,418. 60s. (45s. to members). D
- NATIONAL BOOK LEAGUE 251
Science for all: an annotated reading list for the non-specialist; prep. in consultation with the British Association for the Advancement of Science. Cambridge, CUP, for the League, 1958. pp.viii,177. 9s. 6d. D
- UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION 252
Index translationum: international bibliography of translations. Vol. 9. Paris, Unesco; [London, HMSO], 1958. pp.695, table. 80s. or 4800 fr. D

02 LIBRARIANSHIP

- ASLIB directory: a guide to sources of information in Great Britain and Ireland. Ed. by M. Alman. Aslib, 1957 [i.e. March 1958]. 2 v. 126s. (100s. to members). Vol. 1: Indexes and appendixes, pp.xix,179. Vol. 2: Directory of libraries and information services: regional index, pp.1018. Entries are listed geographically by towns and indexed by UDC classification, and alphabetically by subject and by name. D
- MUSIC LIBRARY ASSOCIATION and AMERICAN LIBRARY ASSOCIATION. Division 254
of Cataloging and Classification.
Code for cataloging music and phonorecords. Chicago, American Library Association, 1958. pp.88. \$2.25. D

3 SOCIAL SCIENCES

301 Sociology

- GITTLER, J. B., *ed.* 255
Review of sociology: analysis of a decade. N.Y., Wiley; London, C & H, 1957. pp.ix,588, bibliog. \$10.50 or 84s. B

32 POLITICAL SCIENCE

- KENNAN, G. F. 256
Russia, the atom, and the West: the BBC Reith Lectures, 1957. OUP, 1958. pp.vii,120. 10s. 6d.
Of the books that pour out on the vexed relations between the West and the Soviets few are as short or as full of good sense as these Reith Lectures. A

- STEWART, J. D. 257
British pressure groups: their role in relation to the House of Commons.
Oxford, Clarendon P., 1958. pp.xii,273, tables, bibliog. 30s. A

35 PUBLIC ADMINISTRATION

- NOBLECOURT, A. 258
Protection of cultural property in the event of armed conflict. Paris, Unesco;
[London, HMSO], 1958. pp.xix,346, illus., plates, tables, diagrs. *Museums and
monuments VIII*. 37s. 6d. or 2250 fr. B

36 WELFARE and INSURANCE

368 Insurance

- KEATE, H. 259
Guide to marine insurance: being a handbook of the law and practice of
marine insurance with special reference to policies on goods. 12th ed., ed. by
C. L. Stark. Pitman, 1958. pp.viii,200. 15s.
Previous ed. 1944. An explanation of the principles of marine insurance, intended specially
for the student. B

5 NATURAL SCIENCES

- VAN NOSTRAND'S scientific encyclopedia, 3rd ed. Princeton (N.J.); London
[etc.], Van Nostrand, 1958. pp.vi,1839, plates, tables, illus., diagrs. 220s. or \$30.
First published 1938. This work has no rival, and is good value at the price, though few
concessions are made to British terminology and spelling. D

51 MATHEMATICS

- EGGLESTON, H. G. 261
Problems in Euclidean space: application of convexity; the Adams prize essay
of the University of Cambridge, 1955-56. London [etc.], Pergamon P., 1957.
pp.viii,167, diagrs. 40s. or \$6.50. *International series of monographs on pure and
applied mathematics*, ed. by I. N. Sneddon.
A discussion of problems which concern convex sets in real Euclidean space of two or
three dimensions. C
- PEDOE, D. 262
Circles. Vol. 2. London [etc.], Pergamon P., 1957. pp.x,78, diagrs. 20s. or
\$3.75. *International series of monographs on pure and applied mathematics*,
ed. by I. N. Sneddon.
Often original in treatment and always stimulating, and of value to technologists as well
as to students of mathematics. C

519 Statistical mathematics

- FELLER, W. 263
An introduction to probability theory and its applications. Vol. 1, 2nd ed.
N.Y., Wiley; London, C & H, 1958. pp.xv,461, tables, diagrs. \$10.75 or 86s.
Publications in mathematical statistics, ed. by W. A. Shewhart, S. S. Wilks.
Previous ed. 1951. Contains two new chapters: combinatorial methods applied to fluctua-
tions in coin-tossing and random walks; compound distributions and branching processes. B

- SMART, W. M. 264
 Combination of observations. CUP, 1958. pp.xi,253, tables, diagrs. 35s.
 Mathematical treatment of the theory of errors for Honours students. C

52 ASTRONOMY

- PEEK, B. M. 265
 The planet Jupiter. Faber, 1958. pp.283, plates, tables, diagrs. 42s.
 First comprehensive account of Jovian astronomy by a well-known authority. B

53 PHYSICS

- COLLOQUIUM SPECTROSCOPICUM INTERNATIONAL VI. Amsterdam 1956. 266
 Proceedings of the colloquium spectroscopicum international vi. Ed. by W. van Tongeren and F. Freese with the co-operation of E. H. S. van Someren. London, Symposium Division Pergamon P., 1957. pp.ix,663, illus, tables, diagrs.; bibliog. 168s. or \$25.

Over 100 papers with a large proportion recording very recent research and investigation. D

- JAKOB, M. 267
 Heat transfer. Vol. 2. With the technical and editorial assistance of S. P. Kezios. N.Y., Wiley; London, C & H, 1957. pp.xxxii,652, tables, diagrs., bibliog. 120s. or \$15.

Together with Vol. 1, which was published about six years ago, this forms a standard book on the subject. C

- HOOPER, J. E. and SCHARFF, M. 268
 The cosmic radiation. London, Methuen; N.Y., Wiley, 1958. pp.172, diagrs., bibliog. 12s. 6d. *Methuen's monographs on physical subjects. Ed.: B. L. Worsnop.*
 Concise account of the techniques and results of cosmic radiation research, presented in a manner suitable for trained physicists. B

- MEETHAM, A. R. 269
 Basic physics. London [etc.], Pergamon P., 1957. pp.xi,144, diagrs. 21s. or \$3.75.

The basic facts of physics are described briefly by means of simple diagrams, and clear verbal description. A

- WRIGHT, W. D. 270
 The measurement of colour, 2nd ed. Hilger & Watts, 1958. pp.ix,263, plates, tables, diagrs. 52s.

Almost completely rewritten for this edition. Describes the principles, methods, and application of the trichromatic system of colour measurement. B

539.1 Atomic energy

- ATOMNAYA ENERGIYA 271
 Physics of nuclear fission: supplement no. 1 of the Soviet journal 'Atomnaya Energiya', tr. from the original Russian by J. E. S. Bradley. London [etc.], Pergamon P., 1958. pp.vi,182, plates, tables, diagrs. 60s. or \$9. *International series of monographs on nuclear energy, ed. by R. A. Charpie and J. V. Durnworth, Division 2: nuclear physics, vol. 2.* C

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CONFERENCE ON THE PRECISION DETERMINATION OF ATOMIC NUCLEAR MASSES, 272
1956, Mainz.

Nuclear masses and their determination: proceedings of the conference held in the Max-Planck-Institut für Chemie, Mainz, 10-12 July 1956, ed. by H. Hintenberg. London [etc.], Pergamon P., 1957. pp.ix,267, plates, tables, diags., bibliog. 84s. or \$14.

Of interest to all who need to use precise mass data.

C

FRISCH, O. R., ed.

273

Progress in nuclear physics. Vol. 6. London [etc.], Pergamon P., 1957. pp.vii,297, plates, tables, diags., bibliog. 84s. or \$14. *Progress series*.

Vol. 5 listed in *Aslib Book-List*, May 1957. Authoritative contributions and the many data tabulated in the majority of the chapters, as well as the careful documentation, make this a useful volume.

C

KUZNETSOV, V. D.

274

Surface energy of solids, tr. from the Russian [by the] Department of Scientific and Industrial Research. HMSO, 1957 [i.e. 1958]. pp.vii,283, tables, diags., bibliog. 8s. 6d.

The aim of the book is to correlate the several phenomena occurring during the failure of brittle materials through the essential property of surface energy.

C

NEARY, G. J. and others

275

Chronic radiation hazards: an experimental study with fast neutrons. By G. J. Neary, R. J. Munson, and R. H. Mole. London [etc.], Pergamon P., 1957. pp.x,191, tables, diags. 45s. or \$7.50.

A comprehensive account of an experiment on mice subjected to fast neutron radiation throughout their lives.

C

SINGLETON, W. R., ed.

276

Nuclear radiation in food and agriculture. Princeton (N.J.); London [etc.], Van Nostrand, 1958. pp.xii,379, illus., tables, diags., bibliog. \$8.50 or 64s. *Geneva series on the peaceful uses of atomic energy*. Ed. by J. G. Beckerley.

Continues the Geneva series with a mixture of papers and reviews. Chiefly valuable as part of complete set.

C

54 CHEMISTRY

BAKER, J. W.

277

Electronic theories of organic chemistry: an introductory treatment. Oxford, Clarendon P., 1958. pp.vii,224, tables, diags., bibliog. 30s.

An elementary, non-mathematical, comprehensive first entry into the subject matter, which follows closely the lead of Ingold and his school.

B

CLADIN, E. F.

278

An introduction to chemical thermodynamics. Oxford, Clarendon P. pp.xv,424, tables, diags., bibliog. 50s.

Should prove particularly useful to those teaching thermodynamics to chemists, when considering presentation of the subject.

B

55 GEOLOGY

AMERICAN GEOLOGICAL INSTITUTE

279

Glossary of geology and related sciences: a cooperative project; coordinating chairman J. V. Howell. Washington, the Institute, 1957. pp.x,325. *National Academy of Sciences, National Research Council publication 501*. \$6.

D

- WESTOLL, T. S., *ed.* 280
Studies on fossil vertebrates, presented to D. M. S. Watson. Athlone P., 1958.
pp.xii,263, tables, diags., bibliog. 35s.

Many fundamental features of vertebrate evolution reconsidered from geological and zoological standpoints. C

57 BIOLOGY

- HOFFMANN, J. 281
The life and death of cells. Hutchinson, 1958. pp.288. 35s. *Scientific and technical publications.*

Originally published New York, 1957. A comprehensive account of the structure and activity of cells under a variety of normal and abnormal conditions. D

- SOCIETY OF AMERICAN BACTERIOLOGISTS 282
Manual of determinative bacteriology, 7th ed., by R. S. Breed, E. G. D. Murray, N. R. Smith. Baillière Tindall & Cox, 1957 [i.e. 1958]. pp.xviii,1094, tables. 120s.
Previous ed. 1948. C

577.1 Biochemistry

- BUTLER, J. A. V. and KATZ, B., *eds.* 283
Progress in biophysics and biophysical chemistry. Vol. 8. London [etc.], Pergamon P., 1957. pp.viii,409, plates, tables, diags., bibliog. 105s. or \$17.50.
Progress series.

Vol. 7 listed in *Aslib Book-List*, Sept. 1957. Four papers deal with physiological and remaining five with physico-chemical problems. C

58 BOTANY

- CANNON, H. G. 284
The evolution of living things. Manchester, Manchester U.P., 1958. pp.x,180.
12s. 6d. A-B

59 ZOOLOGY

- LABORATORY ANIMALS BUREAU 285
Collected papers. Vol. 6. Report of a symposium on humane technique in the laboratory held by UFAW at Birkbeck College, London, on 8th May 1957.
Laboratory Animals Bureau, 1957. pp.81, tables, diags., bibliog. 10s.

Deals with the reduction in the use of experimental animals, and the efficient design of experiments using them. Obtainable from Laboratory Animals Bureau, Holly Hill, London, N.W.3. C

6 APPLIED SCIENCES

- DRUMMOND, J. C. and WILBRAHAM, A. 286
The Englishman's food: a history of five centuries of English diet. Rev. by D. F. Hollingsworth. Preface by N. C. Wright. Jonathan Cape, [1958]. pp.483, plates, bibliog. 36s.

First published 1939. A successful and adequate revision especially of those sections dealing with nutritional problems. A

615 Pharmacy

- FINCH, W. E. 287
Disinfectants: their values and uses; foreword by H. Berry. C & H, 1958.
pp.188, plates, tables, diags., bibliog. 30s.

An authoritative review on the theory, practice, manufacture, and evaluation of disinfectants, this work will interest students, those engaged in the research and manufacture, as well as those concerned with their use. C

- SYMPOSIUM ON 5-HYDROXYTRYPTAMINE, 1957, London 288
5-Hydroxytryptamine: proceedings of a symposium held in London on 1st and 2nd April, 1957, ed. by G. P. Lewis. London [etc.], Pergamon P., [1958]. pp.xvii, 253, tables, diags., bibliog. 60s. or \$9.50. B

- WILKINSON, J. H. 289
Semi-micro organic preparations. London, Edinburgh, O & B, 1958. pp.xii, 184, plate, diags. 15s.
First published 1954. An elementary and introductory text on practical organic chemistry describing semi-microtechniques and a fairly wide range of preparations. B

62 ENGINEERING

- CAMM, F. J., ed. 290
Newnes Engineer's pocket book of tables, formulae, and memoranda, 4th ed. Newnes, 1958. pp.626, tables, diags. 10s. 6d.
Previous ed. 1949. Contains 176 tables and formulae for everyday use by mechanical, automobile, and aircraft engineers. D

621.3 Electrical engineering

- THE ELECTRICAL ENGINEER'S REFERENCE BOOK: a comprehensive work of reference providing a summary of latest practice in all branches of electrical engineering. 9th ed. Eds. E. Molloy, M. G. Say. Newnes, 1958. Tables, diags. 80s. 291
Various pageing. Previous ed. 1955. A veritable encyclopaedia giving basic information on all branches of electrical engineering. B

- MORGAN, T. J. 292
Telecommunication economics: foreword by L. H. Harris. Macdonald, 1958. pp.xv, 452, tables, diags., bibliog. 50s.
Invaluable to system planning engineers interested in the economic aspects of telecommunication. B

- SUMMER, W. 293
Photosensors: a treatise on photo-electric devices and their application to industry. C & H, 1957. pp.xvi, 675, illus., tables, diags. 105s.
Extremely valuable, including in one volume everything there is to be said on the subject to date. B-C

628 Sanitary engineering

- THRING, M. W., ed. 294
Air pollution: based on papers given at a conference held at the University of Sheffield, September 1956. Butterworths, 1957. pp.x, 248, illus., plates, tables, diags., bibliog. 42s.
Full accounts of sources of pollution with recommended methods of reduction from specific industries. B-C

63 AGRICULTURE

- PARKER, M. M. 295
Farm welding: arc and oxyacetylene welding. 3rd ed. N.Y. [etc.], London, McG-H, 1958. pp.x, 262, illus., tables, diags. 42s. or \$5.40. *Rural activities series, ed. by W. A. Ross.* B

ASLIB BOOK-LIST

- SCHWAB, G. O. *and others* 296
 Elementary soil and water engineering by G. O. Schwab, R. K. Frevert, K. K. Barnes, and T. W. Edminster. N.Y., Wiley; London, C & H, 1957. pp.viii,296, illus., tables, diags. \$6.25 or 50s.

Comprises the basic principles and practices of its forerunner and is designed for the agricultural student rather than the engineer. B

639.2 Fisheries •

- BEVERTON, R. J. H. *and* HOLT, S. J. 297
 On the dynamics of exploited fish populations. HMSO, 1957 [i.e. 1958]. pp.533, tables, diags., bibliog. 126s. *Fishery investigations, series 2, vol. 19.* C

65 COMMUNICATIONS, COMMERCE, and ORGANIZATION

- MILLS, G. *and* STANDINGFORD, O. 298
 Office organization and method, 2nd ed. Pitman, 1958. pp.viii,360, illus., diags. 22s. 6d. B

659 Publicity. Information

- HENRY, H. 299
 Motivation research: its practice and uses for advertising, marketing, and other business purposes. Crosby Lockwood, 1958. pp.240, tables, bibliog. 30s.
 Describes a new tool of market research intended to help business men to understand those manipulable factors which govern consumer behaviour. B

- SCOTTISH COUNCIL (Développement & Industry) 300
 Report on a survey of small and medium engineering firms in Scotland with special reference to their needs for information and the flow of information. [Edinburgh, the Council, 1957.] pp.iii,174, tables, mimeographed. 20s. B

66 CHEMICAL TECHNOLOGY

- CLERCK, J. DE 304
 A textbook of brewing, vol. 1, tr. by K. Barton-Wright. C & H, 1957. pp.xx,587, tables, diags. 84s.
 Originally published in French in 1948. An authoritative review of the science and technology of brewing, now revised and translated into English. C

- HARRISON, A. W. C. 302
 The manufacture of lakes and precipitated pigment, 2nd enl. ed., rev. by J. S. Remington and W. Francis. L. Hill, 1957. pp.xx,284, plates, tables, diags., bibliog. 30s.
 First published 1930. Gives clear practical guidance on manufacturing processes and analytical and testing methods in the industry. B

67/68 MANUFACTURES

678.5 Plastics

- FISHER, E. G. 303
 Extrusion of plastics. London, Iliffe, for the Plastics Institute; N.Y., Interscience, 1958. pp.viii,114, plates, tables, diags., bibliog. 21s. or \$3.50. *Ed. engineering series: H. Barker. Ed. chemistry series: P. D. Ritchie.*
 An exposition of the theory and practice of the extrusion of plastics intended mainly for students but its comprehensive scope will make it useful to a wider readership. B

- 304
PLASTICS progress 1957: papers and discussions at the British Plastics Convention. Ed.: P. Morgan. London, Iliffe; N.Y., Philosophical Library, 1958. pp.viii, 394, plates, tables, diags., bibliog. 50s.
Covers very fully recent international advances. D
- REDFARN, C. A. 305
A guide to plastics, 2nd ed. London, Iliffe; N.Y., Philosophical Library, 1958. pp.x, 150, tables, diags., bibliog. 18s.
First published 1951. This edition has been considerably modified to match the extensive developments in the plastics industry since 1957. A
- RESEARCH ASSOCIATION OF BRITISH RUBBER MANUFACTURERS. Intelligence 306
division
British compounding ingredients for rubber, comp. by B. J. Wilson. Cambridge, Heffer, for the Research Association of British Rubber Manufacturers, 1958. pp.xx, 528, diags. 60s.
First comprehensive list of proprietary British and Commonwealth compounding ingredients for natural and synthetic rubber and latices. C
- SCOTT, J. R. 307
Ebonite: its nature, properties, and compounding. Maclaren, 1958. pp.ix, 293, tables, diags., bibliog. 50s. or \$8.
A technological survey based largely on results obtained by the author and his colleagues. The various aspects of ebonite technology are covered in considerable detail. B
- 681 Fine mechanisms
- BOOTH, A. D. and others 308
Mechanical resolution of linguistic problems, [by] A. D. Booth, L. Brandwood, J. P. Cleave. London, Butterworths; [N.Y., Academic P.], 1958. pp.vii, 306, plates, tables, diags. 50s. or \$9.80. C
- BOOTH, K. H. V. 309
Programming for an automatic digital calculator. London, Butterworths; [N.Y., Academic P.], 1958. pp.238, tables, diags. 42s. or \$7.50. C
- MOIR, J. 310
High quality sound reproduction. C & H, 1958. pp.xiv, 591, plates, tables, diags., bibliog. 70s. *Advanced engineering textbooks*.
Deals with all main problems connected with high quality sound reproduction. A clearly written, very necessary book. B-C
- 92 BIOGRAPHY
- WATSON-WATT, R. A. 311
Three steps to victory: a personal account by radar's greatest pioneer. Odhams P., 1958. pp.480, diags. 30s.
An account of the invention and development of radar in war and peace. A

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 OUP Oxford University Press
 ULP University of London Press

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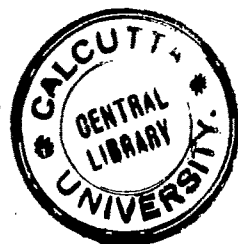
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- WALDO, W. H. 312
Better report writing. N.Y., Reinhold; London, C & H, 1957. pp.vii,231. \$4.75
or 38s. B

01 BIBLIOGRAPHY

- AMERICAN CHEMICAL SOCIETY. Division of Rubber Chemistry 313
1949-51 bibliography of rubber literature (including patents). Akron, Ohio, the
Division, 1957. pp.599. \$7.50.
Obtainable from M. E. Lerner, Rubber Age, 101 West 31st Street, N.Y.1. D
- CUTLIP, S. M. 314
A public relations bibliography and reference and film guides. Madison, Uni-
versity of Wisconsin P., 1957. pp.xvii,313. \$5. D
- DANIELS, L. M., *comp.* 315
Studies in enterprise: a selected bibliography of American and Canadian com-
pany histories and biographies of businessmen. Boston, Baker Library, Harvard
University Graduate School of Business Administration, 1957. pp.xiv,169.
\$4.50. D
- GREAT BRITAIN. Her Majesty's Stationery Office. 316
Consolidated index to Government publications, 1951-1955. HMSO, 1958.
pp.137. 7s. 6d. D
- VAN SOMEREN, E. H. S. and LACHMAN, F. 317
Spectrochemical abstracts. Vol. v 1952-1953. Hilger & Watts, 1958. pp.66. 20s.
Vol. iv 1946-1951 listed in *Book-List* March 1956. Maintains the high standard set by its
predecessors. B

02 LIBRARIANSHIP

- AMERICAN library directory: a classified list of 14,260 libraries with names of
librarians, and statistical data compiled triennially. 21st ed. N.Y., Bowker,
1957. pp.xiii,957. \$22.50. D
- CHICAGO. University. *University College* 319
Proceedings, Executive Conference on Organizing and Managing Information,
February 1, 1957, sponsored in co-operation with Illinois Chapter, Special
Libraries Association and the Graduate Library School, the University of Chi-
cago; ed. by S. F. Harper. Chicago, University College, 1957. pp.64, diagrs.
\$2. B
- LIBRARY ASSOCIATION. Reference and Special Libraries Section 320
Reference and special libraries: technical problems -1957; proceedings of the
annual conference, Harrogate, April 1957; ed. by H. Smith and H. German.
The Section, 1957. pp.48. 3s. (2s. 6d. to members). B

069 Museums

- BOTANICAL SOCIETY OF THE BRITISH ISLES 321
British herbaria: an index to the location of herbaria of British vascular plants with biographical references to their collectors; comp. by D. H. Kent, with the assistance of E. B. Bangerter and J. E. Lousley. The Society, 1957. pp.101. 20s. D

159.9 Psychology

- PAVLOV, I. P. 322
Experimental psychology and other essays. Peter Owen, 1958. pp.653, illus., diagrs. 70s.
A wide and representative selection of papers by the experimentalist whose work on conditioned reflexes forms the basis of official Soviet psychology. C

3 SOCIAL SCIENCES.

- MOSER, C. A. 323
Survey methods in social investigation. Heinemann, 1958. pp.xiii,352, plates, tables, bibliog. 35s. *Books on sociology, ed. by D. G. MacRae.* C

331 Industrial relations

- BEVERSTOCK, A. G. 324
Modern apprenticeship. Classic Publications, 1958. pp.v,89,xiii, bibliog. 10s. 6d.
A practical guide to types of apprenticeship and methods of selection and training. A

- CLARK, F. LE GROS 325
Ageing on the factory floor: the production of domestic furniture; an enquiry made through works records and work descriptions into the prospects of ageing men within a mechanized industry. Nuffield Foundation, 1957, pp.36, tables.
Gratis. *Studies of ageing within the conditions of modern industry.* B

- COPEMAN, G. 326
The challenge of employee shareholding: how to close the gap between capital and labour. Business Publications in association with Batsford, 1958. pp.viii, 200. 18s.
Fifty shareholding schemes are analysed to show how widespread employee shareholding is right in itself and would give capital and labour a true common interest. B

36 WELFARE and INSURANCE

- BANKS, F. 327
Teach them to live: a study of education in English prisons, with a foreword by Lord Birkett. Parrish, [1958]. pp.viii,287, bibliog. 30s.
A pioneering study based on personal experience as a prison tutor organizer. B

37 EDUCATION

- GREAT BRITAIN. Ministry of Education. 328
Schools and the countryside. HMSO, 1958. pp.vi,74. 5s. 6d.
Replaces a pamphlet published in 1934. Explores the educational possibilities of the countryside for both rural and urban schools. A

- HAMMER, P. C., *ed.* 329
The computing laboratory in the university. Madison, University of Wisconsin P., 1957. pp.xv,236, illus., plates, tables, diags., bibliog. \$6.50.
Thirty-one papers by experts mostly from American universities dealing with the impact of computing on the universities are presented. Applications, personnel, equipment, and organization are all treated. C
- JEFFEREY, G. B., *ed.* 330
External examinations in secondary schools: their place and function. Harrap, 1958. pp.128. 7s. 6d.
A set of lectures by prominent educationists. B
- KIRBY, K. S. N. 331
Nature study for schools, ill. by J. Johnson. Methuen, 1958. pp.420, illus., diags., bibliog. 12s. 6d.
Practical suggestions for the teacher. A
- VAIZEY, J. S. 332
The costs of education, with a foreword by R. M. Titmuss. A & U, 1958. pp.256, tables, bibliog. 30s.
Reviews in detail expenditure on education in the United Kingdom from 1920 to 1955. B

4 PHILOLOGY

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52 ASTRONOMY

- AMBARTSUMYAN, V. A., *ed.* 334
Theoretical astrophysics; tr. from the Russian by J. B. Sykes. London [etc.], Pergamon P., 1958. pp.xv,645, tables, diags., bibliog. \$22.50 or 135s.
Originally published Moscow, State Publishing House of Technical and Theoretical Literature, 1952. C
- DE CALLATAÏ, V. 335
Atlas of the sky, tr. and with a preface by H. Spencer Jones. London [etc.], Macmillan, 1958. pp.157, illus., diags. 65s.
Originally published in French under the title *Atlas du Ciel* by Les Editions de Visscher, Brussels, 1955. Only 'naked eye' objects are shown in the excellently produced charts. A

53 PHYSICS

- 336
DICTIONARY of physics; comp. and ed. by H. J. Gray. London [etc.], Longmans Green, 1958. pp.x,544, tables, diags. 84s.
Comprehensive and well up to date. Clear, direct definitions unencumbered by dispensable technical terminology. Probably one of the most successful of single-volume scientific dictionaries. D

- DIRAC, P. A. M. 337
The principles of quantum mechanics. 4th ed. Oxford, Clarendon P., 1958. pp.xii,312. 35s. *International series of monographs on physics. Eds.: N. F. Mott, E. C. Bullard.*

This standard work develops the principles and mathematical methods of quantum mechanics and is now revised to include the theory of electron-pair creation. C

- EASTHOPE, C. E. 338
Three dimensional dynamics: a vectorial treatment. Butterworths, 1958. pp.viii,277, tables, diagrs., bibliog. 42s.

Useful textbook for honours students in mathematics. B

- FROHLICH, H. 339
Theory of dielectrics: dielectric constant and dielectric loss. 2nd ed. Oxford, Clarendon P., 1958. pp.vii,192, tables, diagrs., bibliog. 30s. *Monographs on the physics and chemistry of materials. Eds.: W. Jackson, H. Frohlich, N. F. Mott, E. C. Bullard.*

Designed for students and workers interested in the applications of dielectric materials. C

539.1 Atomic energy

- HUGHES, D. J. 340
On nuclear energy: its potential for peacetime uses; foreword by L. L. Strauss. Cambridge, Harvard U.P.; London, OUP, 1957. pp.xi,263, illus. diagrs. \$4.55 or 30s.

Fundamentals of atomic theory for non-technical readers. A

54 CHEMISTRY

- ALLEN, M. J. 341
Organic electrode processes. C & H, 1958. pp.xiv,174, illus., tables, diagrs., bibliog. 32s.

Comprehensive, concise, and authoritative account of the theoretical background technique. B

- COOK, J. W., ed. 342
Progress in organic chemistry. Vol. 4. London [etc.], Butterworths; N.Y., Academic P., 1958. pp.ix,256, plate, tables, diagrs., bibliog. 50s. or \$8.50. *Progress series.*

Comprises six highly authoritative and specialized articles: the standard is high throughout. C

- DONALDSON, N. 343
The chemistry and technology of naphthalene compounds. Edward Arnold, 1958. pp.xv,512, tables, diagrs., bibliog. 90s.

The preparation and chemical properties, and most important sections of naphthalene and of many of its derivatives are described in the form of a rather condensed literature survey. Many preparations are given in detail. C

- GILLAN, A. E. and STONE, E. S. 344
Introduction to electronic absorption spectroscopy in organic chemistry. 2nd ed.; foreword by E. R. H. Jones. Edward Arnold, 1958. pp.xi,326, plates, tables, diagrs., bibliog. 50s.

An up-to-date introduction to the subject matter which presents, in a lucid manner, the theoretical and experimental aspects, and important analytical applications. B

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- GRAINGER, L. 345
 Uranium and thorium. Newnes, 1958. pp.viii,204, plates, tables, diagrs., bibliog. 25s.

Directed to the technically trained non-specialist, e.g. to chemistry engineers and physicists, not particularly acquainted with the problems of the atomic energy industry. B

- VOGEL, A. I. 346
 Elementary practical organic chemistry. Part III. Quantitative organic analysis. Longmans Green, 1958. pp.xiii,840,xxxii, tables, diagrs., bibliog. 21s.

Part I listed in *Book-List* May 1957. Part II listed October 1957. Should prove useful to students and research workers. B

55 GEOLOGY

551.5 Meteorology

- GARNIER, B. J. 347
 The climate of New Zealand: a geographic survey. Edward Arnold, 1958. pp. 191, plates, tables, diagrs., bibliog. 70s.

The first detailed, regional, climatic survey of New Zealand. Adequate and well presented; an important item of geographical literature. B-C

59 ZOOLOGY

- SCHEER, B. T., ed. 348
 Recent advances in invertebrate physiology; a symposium sponsored by the National Science foundation, the Tektronix foundation and the University of Oregon. Eugene, University of Oregon, 1957. pp.304, illus. \$5.50. B

6 APPLIED SCIENCES

- LEITHAUSER, J. G. 349
 Inventors of our world, tr. from the German by M. Bullock. Weidenfeld and Nicholson, 1958. pp.ix,257, illus., plates. 25s.
 Popular history of technology. A

614 Public health

- HECKSTALL-SMITH, H. W. 350
 Atomic radiation dangers and what they mean to you. Dent, 1958. pp.xii,106, tables, diagrs., bibliog. 7s. 6d.
 Factual account of the dangers arising from the increase in ionizing radiation. A

- MOLLOY, R. E., ed. 351
 Medical electrical equipment: principles, installation, operation and maintenance of electrical equipment used in hospitals and clinics. Newnes, 1958. pp.vii, 323, illus., diagrs. 35s.
 Written for medical staff without specialist electrical knowledge. B

62 ENGINEERING

- MORLEY, A. and HUGHES, E. 352
 Elementary engineering science. 4th ed. Longmans Green, [1958]. pp.xvi,381, tables, diagrs. 11s. 6d.
 Completely rewritten with four additional chapters. B

621.9 Machine tools

- HUNT, DE W. 353
 Shop tools: care and repair. Princeton (N.J.), London [etc.], Van Nostrand, [1958]. pp.vii,252, illus., tables, diags., bibliog. \$5.25 or 32s.
 Comprehensive and well illustrated, suitable for the amateur craftsman. B

624 Civil engineering

- GAYLORD, E. H. and GAYLORD, C. N. 354
 Design of steel structures, including applications in aluminium. N.Y. [etc.], London, McG-H, 1957. pp.xvi,540, illus., tables, diags. \$8.00 or 60s. *Civil engineering series ed. by H. E. Davis.*
 Deals with design of structural members and their connections and with applications to bridges and building frames. B

628 Sanitary engineering

- SCOTT, W. L. and others 355
 Explanatory handbook on the B.S. code of practice for reinforced concrete, no. 114: 1957, by W. L. Scott, W. G. Glanville, and F. G. Thomas. Rev. ed. Concrete Publications, 1957. pp.xi,154, tables, diags. 12s. 6d. *Concrete series.*
 Previous ed. 1950. Incorporates the extensive revisions made to the Code of Practice in 1957 with explanations rewritten where necessary. B

629.19 Astronautics

- MÜLLER, W. D. 356
 Man among the stars. London [etc.], Harrap, 1958. pp.300, plates. 18s.
 Philosophical and scientific aspects of the exploration of space. A

63 AGRICULTURE

- BROWN, H. B. and WARE, J. O. 357
 Cotton, 3rd ed. N.Y. [etc.], London, McG-H, 1958. pp.xi,566, illus., tables, diags., bibliog. 93s. *McG-H publications in the agricultural sciences, ed. by R. A. Brink.*
 Previous ed. by H. B. Brown, 1938. Monograph on (mainly American) cotton growing and marketing. B

635 Horticulture

- FREE, M. 358
 Plant propagation in pictures: how to increase the number of plants in your home and garden by division, grafting, layering, cuttings, bulbs and tubers, sowing seeds and spores; ill step by step with more than 350 photographs and 11 line drawings. Museum P., 1957. pp.221, illus. 32s. 6d.
 Originally published, New York, Doubleday, 1957. B

65 COMMUNICATIONS, COMMERCE, and ORGANIZATION

- INTERNATIONAL CONFERENCE ON OPERATIONAL RESEARCH 359
 Proceedings of the First International Conference on Operational Research, organized by the Operational Research Society, United Kingdom, the Operations Research Society of America [and] the Institute of Management Sciences, Oxford, 1957. English Universities P. for the Conference Committee, 1957. pp.viii,526, plate, tables, diags. 50s. B

655 Printing, publishing, book trade

360

THE PENROSE annual: a review of the graphic arts. Vol. 52: 1958, ed. by A. Dellafons. Lund Humphries, 1958. pp.xxxi,138, plates, tables, diags., bibliog. 42s.

Includes reproduction processes, aesthetic and technical.

B, D

658 Industrial management

MAGEE, J. F.

361

Production planning and inventory control. N.Y., [etc.], London, McG-H, 1958. pp.xiii,333, tables, diags., bibliog. 58s. or \$7.50.

C

ORGANISATION FOR EUROPEAN ECONOMIC CO-OPERATION. European Productivity Agency

362

Glossary of work study terms: English-français-deutsch. Paris, OEEC; [London, HMSO], 1958. pp.124. 9s. or 540 fr.

D

67/68 MANUFACTURES

STAINSBY, G., ed.

363

Recent advances in gelatin and glue research: proceedings of a conference sponsored by the British Gelatine and Glue Research Association held at the University of Cambridge, 1-5 July 1957. London [etc.], Publications Division, Pergamon P., 1958. pp.277, plates, tables, diags., bibliog. \$12 or 70s.

High standard and should be of interest to chemists and technologists working also in related fields of protein chemistry.

C

678 Rubber

RESEARCH ASSOCIATION OF BRITISH RUBBER MANUFACTURERS. Intelligence Division

364

British compounding ingredients for rubber, comp. by B. J. Wilson. Cambridge, Heffer for the Research Association of British Rubber Manufacturers, 1958. pp.xx,528, diags. 60s.

Should prove a valuable practical aid to the works chemist and to all concerned with the compounding of natural and synthetic rubbers, and to the plastics industry.

D

678.5 Plastics

DOMBROW, B. A.

365

Polyurethanes. N.Y., Reinhold; London, C & H, 1957. pp.ix,176, illus., tables, diags., bibliog. \$4.50 or 36s. *Reinhold plastics application series.*

A useful survey which deals in some detail with foams and their uses in other fields.

B

681 Fine mechanisms

SPRATT, H. G. M.

366

Magnetic tape recording. Heywood, 1958. pp.319, illus., diags., bibliog. 55s.

A comprehensive textbook of the subject to date which is easy to read.

B

367

THE PUNCHED card annual of machine accounting and data processing. Vol. 6. Detroit, Gille Associates, 1957. pp.216, illus., tables, diags. \$10.50.

B

69 BUILDING

- BRALEY, E. L. 368
 Brickwork: a comprehensive treatise on the theory and practice of the handicraft of the bricklayer, including an exposition of the manufacture of the customary materials, with some notes on the measurement of brickwork, with a foreword by G. Hicks. Rev. and reprinted. Pitman, 1958. pp.xii,239, illus., tables, diags. 45s.

Originally published 1945.

B

- GREAT BRITAIN. Building Research Station 369
 Drainage pipework in dwellings: hydraulic design and performance, by A. F. E. Wise. HMSO, 1957 [1958]. pp.vi,76, plates, tables, diags. 10s. 6d.

Summarizes the results of research and experience in the design of soil and waste drainage services for houses and multi-storey buildings.

B

7 FINE ARTS

- BIGGS, J. R. 370
 Woodcuts, wood-engravings, linocuts and prints by related methods of relief print making. Blandford P., 1958. pp.176, illus., plates, diags. 27s. 6d.

B

77 PHOTOGRAPHY

- RICKMAN, E. J. and ABBEY, S. 371
 Electronic flash in principle and practice. Pitman, 1958. pp.vii,176, illus., tables, diags. 28s.

A practical manual on electronic flash lamps for the working photographer.

B

91 GEOGRAPHY

- WALKER, D. S. 372
 Geography of Italy. Methuen, 1958. pp.256, plates, tables, diags., bibliog. 30s.
Advanced geographies series.

First adequate English geography of Italy. Well and interestingly written against a full historical background.

B-C

92 BIOGRAPHY

- BARLOW, N., ed. 373
 Autobiography of Charles Darwin 1809-1882; ed. with appendix and notes by N. Barlow. Collins, 1958. pp.253, plates, bibliog. 16s.

The first complete edition of the Autobiography, with additional material including appendices on Erasmus Darwin, and on the quarrel with Samuel Butler.

A

Publishers

THE FOLLOWING ABBREVIATIONS ARE USED IN ASLIB BOOK-LIST

A & U Allen & Unwin
C & H Chapman and Hall
CUP Cambridge University Press
HMSO Her Majesty's Stationery Office
McG-H McGraw-Hill
O & B Oliver and Boyd
OUP Oxford University Press
ULP University of London Press

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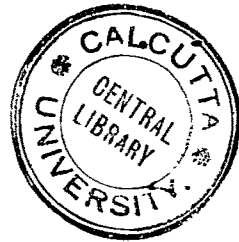
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- LIBRARY ASSOCIATION 374
Catalogue of the library. London, the Association, 1958. pp.vii,519. 126s. D

02 LIBRARIANSHIP

- BRITISH STANDARDS INSTITUTION 375
Universal decimal classification. [Complete English ed.] 69 Building: materials, construction, trades. London, the Institution, 1958. pp.36, tables. 15s. B.S. 1000; F.I.D. publication no. 179. D
- DEUTSCHER NORMENAUSSCHUSS, BRITISH STANDARDS INSTITUTION, ASSOCIATION BELGE DE DOCUMENTATION and UNION FRANÇAISE DES ORGANISMES DE DOCUMENTATION 376
Universal decimal classification. Trilingual (abridged) ed. Berlin, Benth-Vertrieb; London, British Standards Institution, 1958. pp.515, tables. 126s. B.S. 1000B: 1958; F.I.D. no. 277. D

3 SOCIAL SCIENCES

331 Industrial relations

- HABER, L. F. 377
The chemical industry during the nineteenth century: a study of the economic aspect of applied chemistry in Europe and North America. Oxford, Clarendon P., 1958. pp.x,292, tables, diagrs., bibliog. 45s.
Of interest not only to chemists but also the economist, historian, and politician, as well as the most enlightened lay readers concerned with this industry. C

- ISCHBOLDIN, B. 378
Economic synthesis. New Delhi, New Book Society of India, 1958. pp.543, tables. Rs.30, 40s., or \$6.
Address of publishers: New Book Society of India, Publishers, Box No. 250, New Delhi. Written by an Indian who has taught in America and Russia, this is a substantial textbook with good reading list and careful documentation. B

37 EDUCATION

- LOVELL, K. 379
Educational psychology and children. University of London P., 1958. pp.272, tables, diagrs., bibliog. 18s.
This rather over-simplified outline for teachers is up to date and gives some attention to social and emotional development, as well as cognitive abilities. B

5 NATURAL SCIENCES

- GRAY, D. E. and COUTTS, J. W. 380
Man and his physical world. 3rd rev. ed. Princeton (N.J.); London [etc.], Van Nostrand, 1958. pp.x,682, illus., plates, tables, diagrs., bibliog. \$6.50 or 49s.
An excellent introduction for the intelligent layman and non-scientific student to astronomy, geology, physics, and chemistry. A

- SARTON, G. 381
Six wings: men of science in the Renaissance. The Bodley Head, 1958. pp.xiv, 318, illus., plates, bibliog. 25s.
A study of science in the period 1450-1600 by a great historian of science. B

51 MATHEMATICS

- HALL, A. S. 382
The construction of graphs and charts. Pitman, 1958. pp.xii,172, diagsr. 25s.
Covers all aspects of graphical presentation of data for students and engineers. B
- LEFSCHETZ, S. 383
Differential equations: geometric theory. N.Y.; London, Interscience, 1957. pp.x,364, diagsr., bibliog. \$9.50 or 68s. *Pure and applied mathematics series, ed. by R. Courant and others, vol. VI.*
A masterly account of topological aspects of the theory of non-linear differential equations, including the method of Liapunov, and recent work on second-order equations. C

53 PHYSICS

- AERODYNAMICS: a series of papers revised and reprinted from *Research*. Vol. 10. 384
Butterworths, 1957. pp.iii,47, diagsr. 7s. 6d.
An excellent review of modern aerodynamics. B
- LAMBE, C. G. 385
Applied mathematics for engineers and scientists. English Universities P., 1958. pp.xii,518, diagsr. 42s. *Physical science texts, ed. by G. Sutton.*
Mathematical aspects of dynamics, statics, hydrodynamics, and wave motion treated as tools for engineers and scientists. Covers London B.Sc. Engineering requirements. B
- WILSON, C. G. 386
Electricity and magnetism (to advanced and scholarship level). English Universities P., [1958]. pp.xiv,538, tables, diagsr. 21s. *Physical science texts, ed. by G. Sutton.*
Textbook for advanced and scholarship level students. B

539.1 Atomic energy

- LANSDALL, N. 387
The atom and the energy revolution. Penguin Books, 1958. pp.xiv,200. 2s. 6d.
Economic and social implications of atomic energy with particular emphasis on power resources. A

54 CHEMISTRY

- HARRIS, E. T. 388
A structural introduction to chemistry. London [etc.], Blackie, 1958. pp.ix,181, tables, diagsr. 12s. 6d.
A useful supplement to an undergraduate chemistry course, giving a general survey of modern theories of valency. B
- KLYNE, W. and DE LA MARE, P. B. D., eds. 389
Progress in stereochemistry. Vol. 2. London, Butterworths; N.Y., Academic P., 1958. pp.vii,323, tables, diagsr., bibliog. 50s. or \$8.80. *Progress series.*
Covers the very considerable advances in stereochemistry for the period 1953-56. C

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Absorption spectroscopy. 2nd ed. Hilger & Watts, 1958. pp.viii,246, plates, tables, diagrs., bibliog. 52s.

Deals with the principles, applications, and techniques of spectrophotometry: largely rewritten to cover important developments that have taken place in the past decade. B

- PACKER, J. and VAUGHAN, J. 391
A modern approach to organic chemistry. Oxford, Clarendon P., 1958. pp.x, 973, tables, diagrs. 84s.

Gives much more than usual attention to electronic structure and reaction mechanisms, a textbook for first-year chemistry students. B

- SCHULMAN, J. H., ed. 392
Proceedings of the second international congress on surface activity. London [etc.], Butterworths; N.Y., Academic P., 1957. 4 v. 320s. or \$50 per set.

Vol. I: Gas/liquid and liquid/liquid interface. pp.ix,521, illus., tables, diagrs., bibliog. Vol. II: Solid/gas interface. pp.vii,348, tables, diagrs., bibliog. Vol. III: Electrical phenomena and solid/liquid interface. pp.x,621, illus., tables, diagrs., bibliog. Vol. IV: Solid/liquid interface (washings, etc.) and cell/water interface. pp.viii,352, illus., tables, diagrs., bibliog. Many contributions of importance from Russia and Poland as well as from the British Commonwealth, U.S.A., and Japan. C

- VOGEL, A. I. 393
Elementary practical organic chemistry. Longmans, 1958. pp.xxviii,890, diagrs., tables. 45s.

Contains essentially all the practical organic chemistry required by an Honours student, and should prove useful and popular. B

55. GEOLOGY

- AMERICAN GEOLOGICAL INSTITUTE 394
Directory of geological material in North America, by J. V. Howell and A. I. Levorsen. 2nd ed. rev. and enl. with the assistance of R. H. Dott and J. W. Wilds. Washington, the Institute, 1957. pp.vi,208. \$3. *NAS-NRC publication no. 556.*

D

- BOWEN, R. N. C. 395
The exploration of time. Newnes, 1958. pp.vii,143, tables, diagrs. 21s.

An account of methods of dating rocks, fossils, and prehistoric remains, and some of the discoveries made by these methods. B

58 BOTANY

- HYDE, H. A. and ADAMS, K. F. 396
Atlas of airborne pollen grains. Macmillan, 1958. pp.xvi,112, illus., bibliog. 36s.

Describes and illustrates by excellent photomicrographs the air-borne pollens of ninety-two keyed British species. A valuable reference book for palynologists. B

59 ZOOLOGY

- CLOUDSLEY-THOMPSON, J. L. 397
Spiders, scorpions, centipedes, and mites: the ecology and natural history of woodlice, 'myriapods', and arachnids. London [etc.], Pergamon P., 1958. pp.xiv,228, plates, illus., bibliog. 50s. or \$9.

A reliable entertaining general account by a well-known teacher.

A-B

- OLDROYD, H. 398
Collecting, preserving and studying insects. Hutchinson, 1958. pp.327, plates, diags., bibliog. 25s.
A very comprehensive guide giving in simple language detailed instructions in all branches of the subjects designated in the title. A-B

6 APPLIED SCIENCES

62 ENGINEERING

- KEMPE'S engineer's year book for 1958. 63rd ed. Ed. by C. E. Prockter under the direction of B. W. Pendred. Morgan Bros., 1958. Vol. 1: pp.xii,1324, tables, diags. Vol. 2: pp.viii,1416, tables, diags., index. 82s. 6d. 399
A number of sections have been revised and there are minor modifications throughout the text. D

621.3 Electrical engineering

- BROUGHTON, H. H. 400
Electric cranes: a manual on the design, construction, application and operation of electric cranes. 3rd ed. Spon, 1958. pp.xiii,511, illus., tables, diags., bibliog. 150s.
Contains all the information likely to be required by anyone concerned with the design and operation of electric cranes. B

- CALDER, N. 401
Electricity grows up. Phoenix House, 1958. pp.152, plates, bibliog. 15s.
A descriptive account of the fundamental physical concepts with emphasis on electrical and atomic phenomena. A

- GROVER, J. H. H. 402
Aircraft communications systems. Heywood, 1958. pp.vii,127, illus., tables, diags. 22s. 6d.
Description of, and operating instructions for, contemporary British radio installations in aircraft. B

- GUILLEMIN, E. A. 403
Synthesis of passive networks: theory and methods appropriate to the realization and approximation problems. N.Y., Wiley; London, C & H, 1957. pp.xviii,741, diags. \$15 or 120s.
An advanced treatise which presupposes a knowledge of the author's former works on *Circuit theory* and *The mathematics of circuit analyses*. C

- MEARES, J. W. and NEALE, R. E. 404
Electrical engineering practice: a practical treatise for electrical, civil, and mechanical engineers. Vol. 1. 6th ed. rev. C & H, 1958. pp.xiii,716, tables, diags., bibliog. 60s.
Intended for engineers who wish to obtain a clearer picture of modern practice in electrical engineering. B

- STEPHENS, D. D. 405
Synchronous motors and condensers. C & H, 1958. pp.ix,500, plates, tables, diags. 60s. *Advanced engineering textbooks*.
The theoretical advantages of synchronous motors and condensers are fully explained with copious figures and diagrams. C

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- TUTTLE, D. F., *Jnr* 406
Network synthesis. Vol. 1. N.Y., Wiley; London, C & H, 1958. pp.xv,1175, tables, diags., bibliog. \$23.50 or 188s.

Deals with the synthesis of two-terminal networks and, while it does not contain much new material, it presents in one volume a large amount of information scattered over a great many books and periodicals. B

- WOOD, W. S. 407
Theory of electrical machines. Butterworths, 1958. pp.x,317, tables, diags., bibliog. 50s.

Deals with the theoretical analysis of electrical machines without going into constructional details or purely design problems. Intended for final-year electrical engineering students. B

621.7 Workshop practice

- BOWER, C. T. 408
Aids to workshop practice: over 260 workshop ideas, gadgets, and hints for the engineer, mechanic, machinist, home craftsman, and tool-users generally. Odhams P., 1958. pp.192, plates, diags. 18s.

A well-illustrated collection of ideas, hints, methods, and gadgets for making the best of the equipment of a workshop. A

621.8 Power transmission

- MCNEIL, I. 409
Trouble-free hydraulics: a practical handbook on maintenance and fault finding in oil hydraulic machinery. Thames & Hudson, 1958. pp.124, diags. 18s.

Very useful to maintenance staff. Of particular value is a collection of fault-finding charts. A

621.9 Machine tools

- ROSE, H. E. and SULLIVAN, R. M. E. 410
A treatise on the internal mechanics of ball, tube, and rod mills. Constable, 1958. pp.258, illus., plates, tables, diags., bibliog. 25s.

Designers of mills, mining and other students, have now available a compact volume, with a good bibliography, which will enable them to understand clearly a subject the theory of which, in the past, has been somewhat shrouded in mystery. B

- TOURRET, R. 411
Performance of metal-cutting tools. Butterworths, 1958. pp.xii,184, plates, tables, diags., bibliog. 50s.

Presents clearly information on the factors effecting tool performance which have been obtained by research. C

622 Mining

- TAYLOR, J. and GAY, P. F. 412
British coal-mining explosives. Newnes, 1958. pp.vi,175, plates, tables, diags., bibliog. 27s. 6d.

Brief but authoritative account which deals particularly well with the design of detonators and the development of Eq.S. permitted explosives. B

623 Military and Naval engineering

- DAVIS, L. *and others* 413
 Exterior ballistics of rockets by L. Davis, J. W. Follin, L. Blitzer. Princeton (N.J.) [etc.]; London, Van Nostrand, [1958]. pp.v,457, illus., tables, diags. \$8.50 or 64s.
 A coherent account of declassified results obtained by a team at the California Institute of Technology during 1941-46 on fin-stabilized and spin-stabilized rockets. C

635 Horticulture

- BUXBAUM, F. 414
 Cactus culture: based on biology; tr. by V. Higgins. Blandford P., 1958. pp.x,224, plates, diags. 37s. 6d.
 Describes the origin and natural way of growth of the various species, and suggests ways in which the grower can best adapt what facilities he has to create the most favourable conditions. A-B
 MCCONNELL, P., *comp.* 415
 The agricultural notebook: facts and figures for farmers, students and all engaged or interested in farming. 13th ed. [ed. by H. I. Moore]. Farmer & Stockbreeder Publications, 1958. pp.xv,846, tables. 40s.
 Previous ed. 1883. Virtually an encyclopedia covering every branch of British agriculture in convenient pocket-size. D

65 COMMUNICATIONS, COMMERCE, and ORGANIZATION

- HILL, J. W. 416
 Corporate public relations: arm of modern management. N.Y., Harper, 1958. pp.xi,178. \$3.50
 Surveys the value of public relations policies and techniques to industrial and business enterprises. Convincingly presented, and with applications to Britain as much as to U.S.A. A
 OFFICE APPLIANCE AND BUSINESS EQUIPMENT TRADES ASSOCIATION 417
 The manual of modern business equipment. Part 13: Telegraphy in business. 2nd ed. London, Macdonald and Evans for the Association, 1957. pp.30, illus., diags. 4s. 6d. B

66 CHEMICAL TECHNOLOGY

- DE CLERCK, J. 418
 A textbook of brewing. Vol. 2; tr. by K. Barton-Wright. C & H, 1958. pp.xx,650, illus., tables, diags. 105s.
 An invaluable work for all those engaged on the technical side of the industry as well as for students of brewing. C
 GOLDSTEIN, R. F. 419
 The petroleum chemicals industry. 2nd rev. and enl. ed. Spon, 1958. pp.xv,458, tables, diags., bibliog. 95s. *General and industrial chemistry series, ed. by H. M. Bunbury.*
 A thorough revision and considerable extension of the 1949 edition which will ensure the continued life of this book as a classic in its field. C-D

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- HAMMOND, R. 420
 Separation and purification of materials. Heywood, 1958. pp.x,327, diags., tables, bibliog. 50s.

Easily read and will be of most use to students of chemical engineering. The subject matter ranges from sieving to nuclear engineering. A

- HIMUS, G. W. 421
 The elements of fuel technology. 2nd ed. Leonard Hill, 1958. pp.xvi,476, tables, diags., bibliog. 45s.

First published 1947. The whole field of the technology of solid, liquid, and gaseous fuels is broadly outlined, with emphasis mainly on coal, its properties, and British practice in its treatment and uses. B

- KINGERY, W. D., ed. 422
 Ceramic fabrication processes. Published jointly by Technology P. of Massachusetts Institute of Technology and N.Y., Wiley; London, C & H, 1958. pp.ix,235, illus., diags., bibliog. \$9.50 or 76s.

Collection of papers presented at a course at M.I.T. in 1956, for the specialist in ceramics for electronic and nuclear engineering. C

- SCHWARTZ, A. M. and others 423
 Surface active agents and detergents [by] A. M. Schwartz, J. W. Perry, J. Berch Vol. 2. N.Y.; London, Interscience, 1958. pp.xv,839, illus., diags. \$18 or 132s.
 Devoted to developments during 1947-56. C

664 Food industries

- ROGERS, J. L. 424
 Quick-frozen foods: the commerce and technology of processing, packaging, and distribution. Food Trade P., 1958, pp.ix,330, illus. 50s.
 A readable, thorough, but elementary guide to the economics and technology of the frozen foods industry. A

67/68 MANUFACTURES

677 Textiles

- 425
 REVIEW of textile progress. Vol. 8. Manchester, The Textile Institute; Bradford, The Society of Dyers and Colourists, 1957. pp.611, tables, bibliog. 42s. or \$6.
 Probably the most comprehensive report of its kind produced anywhere. D

- SPEEL, H. C. and SCHWARTZ, E. K. W., eds 426
 Textile chemicals and auxiliaries with special reference to surfactants and finishes. 2nd ed., rev. N.Y., Reinhold; London, C & H, 1957. pp.vi,545, illus., tables, diags., bibliog. \$13.50 or 108s.

Previous edition edited by H. C. Speel. Now includes chapters on felts and non-woven fabrics and on the flame-proofing of textiles. C

678.5 Plastics

- BUTZKO, R. L. 427
 Plastic sheet forming. N.Y., Reinhold; London, C & H, 1958. pp.viii,181, illus., tables, diags. \$4.50 or 36s. *Reinhold plastics applications series*.
 A valuable guide to the now widely-used processes of forming plastic sheet, while hot, under air pressure. Treatment of the subject is comprehensive but the costs and machinery included relate to American practice. B

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- FLOYD, D. E. 428
Polymide resins. N.Y., Reinhold; London, C & H, 1958. pp.viii,230, illus., tables, diags., bibliog. \$4.50 or 36s. *Reinhold plastics applications series*.
A review of the uses of polyimides in their various forms together with a brief consideration of their basic chemistry and properties. B

- KUNIN, R. 429
Ion exchange resins. 2nd ed. N.Y., Wiley; London, C & H, 1958. pp.xiii,466, illus., tables, diags., bibliog. \$11 or 88s.
Carefully prepared, well-written, one of the best surveys of ion exchange technology. Much new information especially on permselective membranes, hydrometallurgy, and sugar-refining techniques. C

681 Fine mechanisms

- PHISTER, M., Jr. 430
Logical design of digital computers. N.Y., Wiley; London, C & H, 1958. pp.ix,408, tables, diags., \$10.50 or 84s.
Concerned with the basic principles of the operation of digital computers. No previous experience in computers is assumed. B

7 FINE ARTS

77 PHOTOGRAPHY

- HERTFORDSHIRE. County Council. *Technical Library Service* 431
Microtexts and microrecording: the papers and discussion of a symposium held at Hatfield Technical College on the 14th January, 1958, under the chairmanship of T. G. Mercer. Hatfield, Technical College, 1958. pp.27, plates. 4s. B

- HYMERS, R. P. 432
Business practice for professional photographers. Published under the auspices of the Institute of British Photographers. Fountain P., 1958. pp.359, tables. 42s.
A guide to the running of a photographic business; suitable as a textbook for the student and a reference book for the established professional. C

- STENGER, E. 433
The march of photography. London, N.Y., Focal P., 1958. pp.304, bibliog. 42s.
Translation of a well-known German history of the practical side of photography. Its German bias needs to be kept in mind. A-B

92 BIOGRAPHY

- EYRE, J. V. 434
Henry Edward Armstrong 1848-1937: the doyen of British chemists and pioneer of technical education. Butterworths, 1958. pp.xix,325, plates, diags., bibliog. 30s.
Should be of interest to chemists and others, especially as it presents a good picture of the conditions during the period covered. A

Publishers

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C & H	Chapman and Hall
CUP	Cambridge University Press
HMSO	Her Majesty's Stationery Office
McG-H	McGraw-Hill.
O & B	Oliver and Boyd
OUP	Oxford University Press
ULP	University of London Press

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INTERNATIONAL SOCIOLOGICAL ASSOCIATION
International bibliography of sociology. Vol. vi, works published in 1956. Paris,
Unesco; [London, HMSO], 1958. pp.272. 1,500 fr. or 30s. *International social
science bibliographies.* D
- UNITED NATIONS 436
International bibliography of public administration. N.Y., United Nations;
[London, HMSO], 1957. pp.v,101, mimeographed. \$1 or 7s. *ST/TAA/M/11*;
Sales no.; 1957. 11. H.2. D

02 LIBRARIANSHIP

- UNITED STATES. Library of Congress. *Subject Cataloging Division* 437
Subject headings used in the dictionary catalogs of the Library of Congress.
6th ed.; ed. by Marguerite V. Quattlebaum. Washington, U.S. Government
Printing Office, 1957. pp.viii,1357. \$9.75. D

3 SOCIAL SCIENCES

301 Sociology

- FAIRCHILD, H. P., *ed.* 438
Dictionary of sociology. Vision P., 1958. pp.342. 42s.
Will be of value to the student and lay reader. But the selection of entries and some of the
definitions show a marked transatlantic bias. A-B

31 STATISTICS

- FREUND, J. E. *and* WILLIAMS, F. J. 439
Modern business statistics. Englewood Cliffs (N.J.), Prentice-Hall, 1958. pp.xv,
539. \$10. C
- GREAT BRITAIN. *Interdepartmental Committee on Social and Economic* 440
Research. Sub-Committee on the Ministry of Food.
Agricultural and food statistics. London, HMSO, 1958. pp.vi,71, illus., tables.
4s. 6d. *Guides to official sources, no. 4.* A

33 ECONOMICS

- ARCHER, J. A., *comp.* 441
Loan repayment and compound interest tables for the use of local authorities,
banks, assurance companies, building societies, friendly societies, and others.
10th ed. by P. G. Brown and W. A. Forster. Shaw, 1958. pp.vii,384, illus.,
tables. 98s.
Previous ed. 1949. D

- ROBSON, R. 442
 The man-made fibres industry. London, Macmillan; N.Y., St Martins-P., 1958.
 pp.viii,135, tables, diagrs., bibliog. 21s.

Economic statistics on development, structure, prices, and inter-fibre competition are useful, though the technical content is slight. A-B

- 443
 STATISTICAL summary of the mineral industry: production, exports and imports, 1951-1956. HMSO, 1958. pp.iv,371. 27s. 6d.

Gives statistics of world production, import and export of sixty-six minerals. A valuable reference book for economists, industrialists, and mining engineers. D

37 EDUCATION

- CHESHIRE. *County. Education Committee* 444
 The secondary modern school. London, ULP, 1958. pp.151, bibliog. 12s. 6d.

This report deals thoroughly with many aspects of the secondary modern school and suggests practical teaching methods for the consideration of teachers. B

- COTGROVE, S. F. 445
 Technical education and social change. A & U, 1958. pp.vi,220, tables, bibliog. 25s. *Studies in society, ed. by R. and D. Glass.*

A survey of the influence of social traditions on the development of technical education and an examination of present trends. B

- LUKER, E. W. 446
 School craftwork in wood: a textbook for craft teachers, students, and wood-workers generally, who need to make a study of tools, timber, materials, design, and drawing, in association with the practice of craftwork. 2nd ed., rev. Technical P., 1958. pp.viii,158, illus., plates, diagrs. 21s.

Previous ed. 1938. Extended to cover work with pupils up to eighteen years of age. B

- MONTEITH, A. M. M. 447
 Counting and all that. London, Harrap, 1958. pp.206, illus., plates, diagrs. 15s.
 A discussion of methods in the teaching of arithmetic in infant and junior schools. B

- NEWBURY, N. F. 448
 The teaching of chemistry. 2nd ed. Heinemann, 1958. pp.xv,294, diagrs. 21s.

An excellent text for teachers of chemistry at secondary level. Valuable guidance is given on syllabus selection and on practical and theoretical work to cover the 11 to 18 age group. B

- SCOTTISH COUNCIL FOR RESEARCH IN EDUCATION. *Mental Survey Committee* 449
 Educational and other aspects of the 1947 Scottish mental survey. ULP, 1958. pp.xvii,150, illus., tables. 15s. *Scottish council for research in education, publications, no. 41.* C

4 PHILOLOGY

- HYMAN, C. J., ed. 450
 Dictionary of physics and allied sciences; vol. 1, German-English. Peter Owen, 1958. pp.671. 70s.

An excellent glossary-type dictionary in an important subject-field. A knowledge of physics is essential to the translator as terms are given equivalents without definition. D

5 NATURAL SCIENCES

- CONANT, J. B. and NASH, L. K., eds 451
Harvard case histories in experimental science. Cambridge (Mass.), Harvard U.P., 1959; London, OUP, 1958. Illus., diags. 2 v. \$10 or 80s.
The Harvard case histories, originally published separately, were an experiment in teaching the methodology of science. An outstanding discovery in the history of science was followed through in each. Vol. 1; pp.xvi,321: vol. 2; pp.322-639. B

51 MATHEMATICS

- HARTREE, D. R. 452
Numerical analysis. 2nd ed. Oxford, Clarendon P., 1958. pp.xvi,302, tables, diags., bibliog. 42s.
Includes an account of the numerical solution of differential equations as well as of algebraic equations, etc., by a master of the subject. An excellent introduction for the student. B
- HEADING, J. 453
Matrix theory for physicians. Longmans Green, 1958. pp.xi,242, diags., bibliog. 35s.
Gives basic theory of vector, matrices, and tensors, followed by applications to geometry, dynamics, electromagnetism, relativity, and quantum mechanics. B

519 Statistical mathematics

- ANDERSON, T. W. 454
An introduction to multivariate statistical analysis. C & H, 1958. pp.xii,374, tables, bibliog. 100s.
Methods and problems of multivariate analysis, such as correlation, distribution theorems, testing of hypotheses, are here treated in a single volume, using the techniques of matrix algebra. C
- BELLMAN, R. 455
Dynamic programming. Princeton (N.J.), Princeton U.P.; London, OUP, 1957. pp.xxv,342, tables, diags., bibliog. 42s. *Rand Corporation research studies.* C
- KARMEL, P. H. 456
Applied statistics for economists: a course in statistical methods. Melbourne, London, Pitman, 1957 [i.e. 1958]. pp.xi,452, bibliog. 65s. B
- MORSE, P. MCC. 457
Queues, inventories, and maintenance: the analysis of operational systems with variable demand and supply. N.Y., Wiley; London, C & H, 1958. pp.ix,202. \$6.50 or 52s. *Operations Research Society of America. Publications in Operations Research 1.* C

53 PHYSICS

- COSSLET, V. E. and others, eds 458
X-ray microscopy and microcardiography: proceedings of a symposium held at the Cavendish Laboratory, Cambridge, 1956; ed. by V. E. Cosslet, A. Engström, and H. H. Pattee. N.Y., Academic P., 1957. pp.xviii,645, illus., diags. \$16.50.
More than sixty papers on the techniques and applications of the subject. C

- EHRENBERG, W. 459
Electric conduction in semiconductors and metals. Oxford, Clarendon P., 1958. pp.x,389, tables, diagrs., bibliog. 63s.
An introduction to the physics of semiconductors dealing mainly with their electrical properties. Intended for research workers. C
- EIRICH, F. R., *ed.* 460
Rheology: theory and applications; vol. 2. N.Y., Academic P., 1958. pp.xiii, 591, illus. \$18. B
- HEISENBERG, W. 461
The physicist's conception of nature. Hutchinson, 1958. pp.192, bibliog. 16s.
The author's essays on the philosophy of physics are here presented. Quotations from famous physicist-philosophers make up the second half of the book. C
- MARTIN, L. C. *and* JOHNSON, B. K. 462
Practical microscopy. 3rd ed. Blackie, 1958. pp.138, illus., plates, tables, diagrs. 12s. 6d.
First published 1931. Revised to give indications of modern trends in microscopic design and microscopical techniques, yet retaining the bulk of the text and illustrations in the 2nd ed. 1949. B
- SCHROEDINGER, E. 463
Science theory and man. A & U, 1957. pp.xxiv,223, diagrs., bibliog. 18s.
Formerly published as *Science and the human temperament*. Classical essays on the philosophical problems of the new physics. First issued in 1935. A paper of 1950 has been added. A
- WOODALL, A. J. 464
Heat: to advanced and scholarship level. EUP, 1958. pp.xii,373, tables, diagrs. 21s. *Physical science texts; gen. ed. G. Sutton.*
The scope is from the end of G.C.E. 'O' level to the end of first-year university courses, and the treatment is sound and well ordered. B
- 539.1 Atomic energy**
- PRICE, W. J. 465
Nuclear radiation detection. N.Y., McG-H, 1958. pp.viii,382, bibliog. \$9.
McGraw-Hill series in nuclear engineering.
Basic information on all radiation detectors now in use together with notes on applications. For students. B
- 54 CHEMISTRY**
- ALBERT, A. *and others, eds.* 466
Current trends in hetrocyclic chemistry: proceedings of a symposium held at the John Curtin School of Medical Research, Australian National University, Canberra, 2nd-4th September 1957 under the auspices of the Chemical Society; ed. by A. Albert, G. M. Badger, C. W. Shoppee. Butterworths, 1958. pp.ix,170, tables, diagrs., bibliog. 30s.
The record of the most important 1957 Canberra symposium. Covers progress in a field where the biochemist, pharmacologist, and industrial chemist are all interested. C
- BIKERMAN, J. J. 467
Surface chemistry: theory and applications. 2nd ed., rev. and enl. N.Y., Academic P., 1958. pp.x,501, illus. \$15. C

55 GEOLOGY

- CRUDE oil and natural gas: the search for and exploitation of crude oil in the OEEC area. Paris, OEEC, 1957. pp.79, tables, diagrs. 3500 fr., 60s., or \$10. 468
An evaluation of the oil and gas prospects of the OEEC member countries, including a geological map of the whole area and concession details. Applicable mining laws are outlined. C
- ZEUNER, F. E. 469
Dating the past: an introduction to geochronology. 4th ed. rev. and enl. Methuen, 1958. pp. xx, 516, plates, tables, diagrs., bibliog. 50s.
A very good account of geochronology suitable for both student and layman by virtue of its easy and clear presentation of a wealth of subject matter dealing with the methods, techniques, results and their implications, fully supported by an extensive list of references. The book has been brought up to date. B

550.3 Geophysics

- LANDSBERG, H., ed. 470
Advances in geophysics; vol. 4. N.Y., Academic P., 1958. pp.410, illus. \$12. C

551.5 Meteorology

- SMITH, L. P. 471
Farming weather. Nelson, 1958. pp.ix,208, plates, maps, tables, diagrs. 15s. Agriculture series ed. by Sir W. G. Ogg and G. V. Jacks. A-B

57 BIOLOGY

- BARNETT, S. A., ed. 472
A century of Darwinism. London [etc.], Heinemann, 1958. pp.xvi,376, illus., plates, diagrs., bibliog. 30s.
Fifteen essays by experts on the present state of topics bound up with Darwin's theory of evolution. For the general reader with a smattering of biology. A-B
- BECK, W. S. 473
Modern science and the nature of life. Macmillan, 1958. pp.xix,302, diagrs., bibliog. 15s.
A stimulating review of the development of biological thought with a brief account of modern theories on the origin of life. A
- DE BEER, G. 474
Charles Darwin: a lecture on a master mind. Henrietta Hertz Trust of the British Academy 1958. OUP, 1958. pp.23, bibliog. 3s. 6d.
From the proceedings of the British Academy. Volume XLIV. Short account of the development of Darwin's ideas on evolution and of the contemporary states of Darwinism. A

58 BOTANY

- ROSS-CRAIG, S. 475
Drawings of British plants, being illustrations of the species of flowering plants growing naturally in the British Isles. Part 11, Droseraceae-ficoidaceae. London, Bell, 1958. pp.[7], 40 plates. 9s. 6d.
The first part (Ranunculaceae) was issued in 1948 and the work when complete will provide a standard series of some 1500-1800 full-page illustrations. C

59 ZOOLOGY

- GOETSCH, W. 476
 The ants; [tr. by R. Manheim]. Ann Arbor, University of Michigan P., 1957.
 pp.169, illus. \$4.50. *Ann Arbor science library*.
 This book by one of the world's leading scientists in the field opens to the general reader
 a society as complex as our own. A
- LINDROTH, C. H. 477
 Faunal connections between Europe and North America. N.Y., Wiley; Lon-
 don, C & H; Stockholm, Almquist, 1957. pp.344, illus. \$15, 120s., or 78 kr. B
- WILLIAMS, C. B. 478
 Insect migration. Collins, 1958. pp.xiii,235, plates, maps, tables, diagrs.,
 bibliog. 90s. *New Naturalist series* ed. by James Fisher and others; no. 36.
 The outcome of the author's life-long interest and study of the problem of insect migra-
 tion, this work gives an up-to-date assessment of the present knowledge of the subject. A

6 APPLIED SCIENCES

62 ENGINEERING

624 Civil engineering

- O'DEA, W. T. 479
 The social history of lighting. Routledge & K. Paul, 1958. pp.xv,254, illus.,
 plates, map, tables, bibliog. 42s.
 A useful addition to the literature of the history of science and technology. Will appeal
 particularly to illumination engineers. A
- MORICE, P. B. and COOLEY, E. H. 480
 Prestressed concrete: theory and practice. Pitman, 1958. pp.viii,394, illus, tables,
 diagrs., bibliog. 57s. 6d.
 Deals with the theory and applications of prestressed concrete. Intended for civil engineers
 and second-year university students. B

628 Sanitary engineering

- FAIR, G. M. and GEYER, J. C. 481
 Elements of water supply and waste-water disposal. N.Y., Wiley; London,
 C & H, 1958. pp.vii,615, illus. \$8.95 or 72s.
 Intended for undergraduate students of sanitary engineering. The scientific principles used
 in the treatment of water and sewage are dealt with. B

63 AGRICULTURE

- AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE 482
 Atomic energy and agriculture: a symposium presented on December 27-29,
 1955, at the Atlanta meeting of the Association and co-sponsored by the Oak
 Ridge Institute of Nuclear Studies, under contract with the U.S. Atomic Energy
 Commission; ed. by C. L. Comar. Washington, The Association; London,
 Bailey & Swinfern, 1957. pp.x,450. \$9.50 or 86s. *A.A.A.S. publication 49* B

65 COMMUNICATIONS, COMMERCE, and ORGANIZATION

- KHINCHIN, A. I. 483
Mathematical foundations of information theory; tr. [from the Russian] by R. A. Silverman and M. D. Friedman. N.Y., Dover; London, Constable, 1957. pp.vii,120, bibliog. 11s.
. Contains translations of two papers: 'The entropy concept in probability theory' and 'On the fundamental theorems of information theory'. C

651/652 Office management

- NATIONAL OFFICE MANAGEMENT ASSOCIATION. *National Office Automation Committee* 484
Automation in the office: a survey report based on data from 3,936 companies throughout the United States and Canada, data as of summer 1957. Willow Grove (Pa.), the Association, 1958. pp.24, illus., tables. \$5. *Survey summary no. 21.* B
OFFICE MANAGEMENT ASSOCIATION. Organisation and Methods Study Group 485
The control of quality in the office. London, the Association, 1958. pp.vii,36, diagsr. 9s. • B

655 Printing, publishing, book trade

- BERRY, W. T. and others 486
The encyclopaedia of type faces [by] W. Turner Berry, A. F. Johnson, W. P. Jaspert. New ed. rev. and enl. London, Blandford P., 1958. pp.358, illus. 55s. D

656 Transport

- WHEELER, G. J. 487
Ship salvage. George Philip, 1958. pp.vi,154, plates, plan, tables. 15s. B

658 Industrial management

- DORFMAN, R. and others 488
Linear programming and economic analysis; by R. Dorfman, P. A. Samuelson, and R. M. Solow. N.Y., London, McG-H, 1958. pp.ix,527. \$10 or 77s. 6d. *Rand series.* C

66 CHEMICAL TECHNOLOGY

- MELLAN, I. 489
Source book of industrial solvents: vol. 2, halogenated hydrocarbons. N.Y., Reinhold; London, C & H, 1957. pp.iii,267, tables, diagsr., bibliog. \$6.50 or 56s.
An authoritative review of the chemical structure, physical properties, and end uses of halogenated hydrogen solvents by an acknowledged expert in the field of industrial solvents. C

67/68 MANUFACTURES

674 Timber

- BRITISH WOOD PRESERVING ASSOCIATION 490
Record of the 1957 annual convention of the Association, Cambridge, July 3-6, 1957. The Association, 1957. pp.vii,216, illus., tables, diagsr. 12s. 6d.
Seven papers on various aspects of wood preservation together with ensuing discussions. B

677 Textiles

- HINDSON, A. 491
 Designer's drawloom: an introduction to drawloom weaving and repeat pattern planning. Faber, 1958. pp.236, plates, diags., bibliog. 30s.
 Contains everything which needs to be known about making and using a drawloom for experimental hand-weaving of repeating patterns, with remarkably clear illustrations. C

69 BUILDING

- DAVIDSON, D. M. J. 492
 Floors and floorings. Crosby Lockwood, 1958. pp.xi,116, plates, tables, diags. 12s. 6d.
 Deals with structural floors and floor coverings, and is intended for architects, builders, surveyors, and house owners. A

7 FINE ARTS

72 ARCHITECTURE

- BLUNT, Sir A. 493
 Philibert de l'Orme. London, Zwemmer, 1958. pp.xiv,162, illus., plates. 70s.
Studies in architecture, no. 1. A-B
- PARK, J. 494
 Houses and bungalows. Batsford, 1958. pp.191, illus., plans, tables, diags., bibliog. 45s.
 A good general book on the subject for those employed in the building trade, architects, and others. A-B

Publishers

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A & U	Allen & Unwin
C & H	Chapman and Hall
CUP	Cambridge University Press
EUP	English Universities Press
HMSO	Her Majesty's Stationery Office
McG-H	McGraw-Hill
O & B	Oliver and Boyd
OUP	Oxford University Press
ULP	University of London Press

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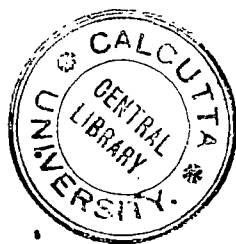
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- TRELEASE, S. F. 495
How to write scientific and technical papers. Baltimore, Williams & Wilkins;
London, Baillière, 1958. pp.xii,185, tables, diagrs. \$3.25 or 26s. B

01 BIBLIOGRAPHY

- AMERICAN STUDIES ASSOCIATION 496
Bibliography of American culture, 1493-1875; comp. and ed. by David R.
Weimer. Ann Arbor, Mich., University Microfilms, 1957. pp.xvi,228. \$3.50 or
20s. D
- BAKER, E. A. and FOSKETT, D. J. 497
Bibliography of food: a select international bibliography of nutrition, food,
and beverage technology and distribution, 1936-56. London, Butterworths;
[N.Y., Academic P.], 1958. pp.xii,331. 63s. or \$11. D
- COUNCIL FOR INTERNATIONAL ORGANIZATIONS OF MEDICAL SCIENCES 498
Bibliography of international congresses of medical sciences; prep. by W. J.
Bishop. Oxford, Blackwell; Springfield, Ill., C. C. Thomas, [etc.], 1958.
pp.xxii,238. 25s. D
- INTERNATIONAL ASSOCIATION FOR RESEARCH IN INCOME AND WEALTH 499
Bibliography on income and wealth; vol. VI: 1953-1954; ed. by Phyllis Deane.
London, Bowes & Bowes, 1958. pp.139. 37s. 6d. *Annotated international biblio-*
graphies on income and wealth, vol. VI. D.
- INTERNATIONAL COMMITTEE FOR SOCIAL SCIENCES DOCUMENTATION and 500
INTERNATIONAL ECONOMIC ASSOCIATION
International bibliography of economics; vol. v, works published in 1956.
Paris, Unesco; [London, HMSO], 1958. pp.474. 2400 fr. or 40s. *International*
social science bibliographies. D
- INTERNATIONAL COMMITTEE FOR SOCIAL SCIENCES DOCUMENTATION and 501
INTERNATIONAL POLITICAL SCIENCE ASSOCIATION
International bibliography of political science; vol. v, works published in 1956;
ed. Jean Meynaud. Paris, Unesco; [London, HMSO], 1958. pp.296. 24s. 6d.
International social science bibliographies; documentation in the social sciences.
D
- MELLON, M. G. 502
Chemical publications: their nature and use. 3rd ed. N.Y., [etc.], London,
McG-H, 1958. pp.x,327. \$7 or 54s. 6d. D
- NATIONAL PETROLEUM BIBLIOGRAPHY 503
Petroleum sourcebook 1958: a regional bibliography of petroleum information.
Amarillo, Texas, National Petroleum Bibliography, 1958. pp.iv,179. \$6. D

02 LIBRARIANSHIP

- AMERICAN LIBRARY ASSOCIATION. Cataloging and Classification Section. 504
Policy and Research Committee
 Catalog use study: director's report by Sidney L. Jackson: ed. by Vaclav Mostecky. Chicago, the Association, 1958. pp.vii,86, tables. \$2.25. B
- LANDAU, T., ed. 505
 Encyclopaedia of librarianship. London, Bowes & Bowes, 1958. pp.ix,334. 63s. A
- LIBRARY ASSOCIATION. Reference and Special Libraries Section. *West Midlands Group* 506
 Library resources in the West Midlands: ed. by Brian Gerrard Staples. London, Library Association, 1958. pp.viii,49. 15s. D
- MASON, D. 507
 A primer of non-book materials in libraries: with an appendix on sound recordings by Jean C. Cowan. London, Association of Assistant Librarians, 1958. pp.xii,115, illus., plates, tables, diags. 20s. (15s. to members). B

06 SOCIETIES and INSTITUTIONS

- BATES, R. S. 508
 Scientific societies in the United States. 2nd ed. N.Y., Columbia University P. and Technology P., Massachusetts Institute of Technology; London, OUP, 1958. pp.xiii,297. \$6 or 25s. B

4 PHILOLOGY

413 Dictionaries

- CONSULTANTS BUREAU 509
 Russian-English glossary of acoustics and ultrasonics. N.Y., the Bureau, 1958. pp.170,xxiii. \$10. D
- CONSULTANTS BUREAU 510
 Russian-English glossary of nuclear physics and engineering. N.Y., the Bureau, 1957. pp.195, mimeographed. \$10.
 Incorporates all the terms of the dictionary by N. N. Ershov, Y. V. Semenov, and A. I. Cherny, published by the Institute of Scientific Information of the Academy of Sciences of the U.S.S.R. D
- CONSULTANTS BUREAU 511
 Russian-English glossary of solid state physics. N.Y., the Bureau, 1958. pp.90, mimeographed. \$10. D

5 NATURAL SCIENCES

51 MATHEMATICS

- LEWIN, L. 512
 Dilogarithms and associated functions; foreword by J. C. P. Miller. Macdonald, 1958. pp.xvi,353, tables, bibliog. 65s.
 The first comprehensive account of the dilogarithm and its generalizations. Clearly written and contains a multitude of curious and interesting formulae. C

- PEDOE, D. 513
The gentle art of mathematics; with drawings by Griselda El Tayeb. EUP, 1958. pp.143, illus., diags. 15s.
An entertaining and instructive survey of the background to modern pure mathematics in a form suitable for the general reader by a well-known professional mathematician. A
- PIPES, L. A. 514
Applied mathematics for engineers and physicists. 2nd ed. N.Y., [etc.], London, McG-H, 1958. pp.xi,723, tables, diags. \$8.75 or 68s.
An advanced text covering a wide range of topics in the calculus fields such as are necessary for present-day engineering analysts. C

53 PHYSICS

- CHISHOLM, J. S. R. and DE BORDE, A. 515
An introduction to statistical mechanics. London, [etc.], Pergamon P., 1958. pp.ix,160, tables, diags., bibliog. 35s. or \$6. *International series of monographs on physics, ed. by G. H. A. Cole; vol. 2.*
An excellent study in the use of statistical methods in physical and mathematical problems. C
- LANDAU, L. D. and LIFSHITZ, E. M. 516
Statistical physics; tr. from the Russian by E. Peierls and R. F. Peierls. London, [etc.], Pergamon P., 1958. pp.x,484, diags. 80s. *Course of theoretical physics, vol. 5.*
A new major work by two very distinguished Russian authors, it is one of a series covering the whole of theoretical physics. It presents a self-contained account and is lucidly translated. B
- LANDAU, L. D. and LIFSHITZ, E. M. 517
Quantum mechanics: non-relativistic theory; tr. from the Russian by J. B. Sykes and J. S. Bell. London, [etc.], Pergamon P., 1958. pp.xii,515, tables, diags. 80s. *Course of theoretical physics, vol. 3.*
A good translation of an important survey of non-relativistic quantum mechanics by two distinguished Russian academicians. Although it has not been revised since first publication in 1948 it is still a useful book of considerable interest. B-C
- MASON, P. and WOOKEY, N., eds. 518
The rheology of elastomers: proceedings of a conference organized by the British Society of Rheology and held at the British Rubber Producers' Research Association, Welwyn Garden City, in May 1957. Symposium Publications Division, Pergamon P., 1958. pp.viii,208, plates, tables, diags., bibliog. 50s.
For those with previous experience who wish to become familiar with some recent developments. Reviews the theory of large elastic deformations and specialized researches into the rheological behaviour of high polymers. C
- MEYLER, D. S. and SUTTON, O. G. 519
A compendium of mathematics and physics. EUP, 1958. pp.x,384, tables, diags. 25s.
A well-balanced and concise synopsis of mathematical and physical principles and formulae. Helpful, both for study and reference, to students and technologists of advanced G.C.E. level and over. Excellent layout, typography, indexes, and cross-references. B
- NELKON, M. and PARKER, P. 520
Advanced level physics. Heinemann, 1958. pp.xi,1057, illus., tables, diags. 30s.
By incorporating a new 'Electricity and magnetism' with three existing texts, a complete advanced level physics textbook, soundly written, has been presented in one volume. B

THE PHYSICAL SOCIETY

521

Reports on progress in physics; vol. xxi (1958), ed. by A. C. Stickland. The Society, 1958, pp.383, illus., tables, diags., bibliog. 63s.

A collection of articles reviewing fairly narrow topics describing the present position and taking account of earlier literature where necessary. Suitable not only for the specialist but also for chemists, physiologists, and crystallographers requiring up-to-date information. C

RUSSELL, B.

522

A B C of relativity. 1st rev. ed.; ed. by F. Pirani. A & U, 1958. pp.139. 15s.

A revision of the first edition of 1925, with Chapter 11 on the expanding universe re-written by F. Pirani. A

Ryder, G. H.

523

Mechanics applied to engineering. Cleaver-Hume, 1958. pp.viii,244, tables, diags. 21s.

A concise textbook for the first-year student, clearly written and up to date. B

SCARBOROUGH, J. B.

524

The gyroscope: theory and applications. N.Y., London, Interscience, 1958. pp.xii,257, illus., tables, diags., bibliog. 46s.

A clear and systematic mathematical account of the theory and modern applications of the gyroscope, including a detailed discussion of the astronomical applications. B

SCHURE, A., ed.

525

Electrostatics. N.Y., John F. Rider, 1958. pp.vii,64, diags. \$1.35. *Electronic technology series*.

A short paper-back account of elementary electrostatics. The subject matter is presented lucidly, the mathematics employed are very simple, and the text is supported by a considerable range of useful examples. B

539.1 Atomic energy

BOHR, N.

526

Atomic physics and human knowledge. N.Y., Wiley; London, C & H, 1958. pp.viii,101, illus., diags. \$3.95 or 32s.

Seven essays published between 1933 and 1955 dealing with the more profound issues raised by atomic physics and life in the light of human understanding. The essays, though self-contained, show a continuous development of thought, lucidly expressed, by a great physicist and philosopher. Suitable for the intelligent layman. A

FRENCH, A. P.

527

Principles of modern physics. N.Y., Wiley; London, C & H, 1958. pp.ix,355, diags. \$6.75 or 54s.

Discussion, on advanced undergraduate level, of the development and inter-relations of the concepts and principles of atomic structures. C

54 CHEMISTRY

BELLAMY, L. J.

528

The infra-red spectra of complex molecules. 2nd ed. London, Methuen; N.Y., Wiley, 1958. pp.xviii,425, tables, diags., bibliog. 42s.

Previous ed. 1954. Presents, group by group, the correlation between the structure of organic compounds and the characteristics of their infra-red spectra, with due reference to the significance and reliability of such correlations in different instances. Of great value to all using infra-red spectra for structure determination. C

- GUNSTONE, F. D. 529
An introduction to the chemistry of fats and fatty acids; foreword by T. P. Hilditch. C & H, 1958. pp.x,161, tables. 32s.

A short book designed for honours students of chemistry and biochemistry dealing with the chemistry, physical properties, biosynthesis and metabolism, and with the technical properties of fats and fatty acids. B

- INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY. Protein Com- 530
mission of the Section of Biological Chemistry
Symposium on protein structure: (Paris meeting 1957); ed. by A. Neuberger.
London, Methuen; N.Y., Wiley, 1958. pp.351, illus., plates, diagrs. 45s.

Selected papers and contributions to the discussion of the symposium, containing many distinguished contributions. Good editing has made it a particularly valuable account of the present state of the subject. B

- NOLLER, C. R. 531
Textbook of organic chemistry. 2nd ed. Philadelphia, London, W. B. Saunders,
1958. pp.x,654, tables, diagrs. \$7 or 49s.

The second edition, considerably revised, of a useful, comprehensive textbook for the chemistry student studying for his first degree. B

57 BIOLOGY

- DARWIN, C. and WALLACE, A. R. 532
Evolution by natural selection. Foreword by G. de Beer. Cambridge, CUP for
the XV International Congress of Zoology and the Linnean Society of London,
1958. pp.viii,288. 25s.

A republication of Darwin's *Sketch* of 1842, his *Essay* of 1844, and the Darwin-Wallace papers of 1858. B

- HALE, A. J. 533
The interference microscope in biological research; with a foreword by R. C.
Garry. Edinburgh, London, Livingstone, 1958. pp.xi,114, plates, tables, diagrs.,
bibliog. 20s.

An introduction, suitable for biologists and medical men, to the technique and application of a relatively new method which has already given some interesting results in cytochemical research. B

- STANIER, R. Y. and others 534
General microbiology; by R. Y. Stanier, M. Doudoroff, and E. A. Adelberg.
Macmillan, 1958. pp.xxiii,682, illus., tables, diagrs. 50s.

A well-written, interesting, and adequate account of modern microbiological knowledge which the undergraduate biologist will find useful. B

59 ZOOLOGY

- EVANS, H. E. 535
Studies on the comparative ethology of digger wasps of the genus *bembix*.
Ithaca, N.Y., Comstock, 1957; London, Constable, 1958. pp.ix,292, illus. \$4.75
or 37s. 6d. *Cornell University. Cornell studies in entomology.* C

- RAVEN, C. P. 536
Morphogenesis: the analysis of molluscan development. London, [etc.], Per-
gamon P., 1958. pp.ix,311, plates, diagrs., bibliog. 70s. or \$10. *International
series of monographs on pure and applied biology. Division: Zoology. Gen. eds.:
J. E. Harris and E. W. Yemm.*

A comprehensive account of the subject. B

6 APPLIED SCIENCES

62 ENGINEERING

620.1 Strength of materials

- OKERBLOM, N. 537
The calculations of deformations of welded metal structures; rev. by V. D. Matshevich, ed. by N. G. Bazilevskii, tr. from the Russian by L. C. Ronson. HMSO, 1958. pp.viii,234, diags., bibliog. 15s.

A book of considerable value in design offices for fabricated steel structures, the author of which supervised the extensive research that forms the background of the book. C

621 Mechanical engineering

- DE KOVÀTS, A. and DESMUR, G. 538
Pumps, fans, and compressors; tr. from the original French by R. S. Eaton. Blackie, 1958. pp.327, illus., tables, diags., 45s.

Contains detailed empirical information derived from practical experience on the design of turbomachines, together with sample design calculations. C

621.3 Electrical engineering

- GIBBS, W. J. 539
Conformal transformations in electrical engineering. London, C & H, 1958. pp.viii,219, tables, diags., bibliog. 45s.

Gives the elements of field theory and of complex numbers, practical examples of transformations, and transformations involving elliptic functions. C

- NELKON, M. 540
The principles of technical electricity. 3rd ed. Blackie, 1958. pp.250, tables, diags. 15s.

First published 1946. The second edition of 1955 has been revised in terms of M.K.S. system of units. The book is intended especially to cover the syllabus of C and G telecommunications, parts 1 and 2. B

- OTTO, C. A., ed. 541
Electric furnaces, [by] eleven special contributors. Newnes, 1958. pp.vii,248, illus., tables, diags. 35s.

Deals with industrial applications of arc, induction, resistance, and h.f. capacitance furnaces. B

621.9 Machine tools

- BONEHAM, W. 542
Fine boring and turning. Brighton, Machinery Publishing Co., 1958. pp.68, illus., diags., tables. 5s. *Machinery's yellow back series, no. 43.*

Describes the machinery and technique of boring and turning to very fine limits. C

622 Mining

- NOVOMEYSKY, A. 543
Given to salt: the struggle for the Dead Sea concessions; tr. of portions from the Russian and arrangement of material by A. Brown. Max Parrish, 1958. pp.286, plates. 25s.

An account of the author's long, untiring efforts to establish an industry to extract potash from the Dead Sea, and his ultimate success. A

629 Transport engineering

- YOUNG, A. P. and GRIFFITHS, L. 544
Automobile electrical equipment: theory and practice for students, designers, automobile electricians, and motorists. 6th ed. Iliffe, 1958. pp.393, illus., tables, diags. 30s.
Explains the fundamental principles underlying the various types of electrical equipment used in vehicles. B

63 AGRICULTURE

- EDEN, T. 545
Tea. Longmans Green, 1958. pp.xiii,201, plates, diags., bibliog. 35s.
This work is a descriptive account of the cultivation and manufacture of tea and is not limited to any particular region. There is a short section on marketing and the tea trade. Each chapter is well documented from a wide range of sources. B

- FOOD AND AGRICULTURAL ORGANIZATION OF THE UNITED NATIONS 546
International directory of agricultural engineering institutions; prep. by H. J. Hopfen. Rome, F.A.O.; [London, HMSO], 1957. pp.326, mimeographed. \$1.
D

637 Dairying

- TRACY, P. H. and others 547
Dairy plant management, by P. H. Tracy, G. D. Armerding, H. W. Hannah. N.Y., [etc.], London, McG-H, 1958. pp.x,439, plans, tables, diags. \$8.50 or 66s. *Publications in the agricultural sciences*, ed. by R. A. Brink. B

66 CHEMICAL TECHNOLOGY

- EUROPEAN FEDERATION OF CHEMICAL ENGINEERING 548
Chemical reaction engineering: 12th meeting of the Federation, Amsterdam, 7th, 8th and 9th May, 1957. Vol. 1. London, N.Y., [etc.], Pergamon P., 1957. pp.viii,200, tables, diags., bibliog. 80s. or \$12.50. *International series of monographs on chemical engineering*, ed. by P. V. Dankwerts and R. F. Baddour.
Contains thirteen papers given by leading authorities in chemical engineering in Western Europe, printed in full. C

- MELLAN, I. 549
Handbook of solvents; vol. 1, pure hydrocarbons. N.Y., Reinhold; London, C & H, 1957. pp.iv,249, tables, diags., bibliog. 52s.
The first of a series of volumes intended for the industrial user of organic solvents, by an American author eminent in this field. Refers largely to American grades and trade names and should be a useful reference work for comparative purposes. The end use data in sections dealing with pure substances should be of particular value. C

67/68 MANUFACTURES

- BRAZIER, G. W. and HARRIS, N. A. 550
Wood work. Christophers, 1958. pp.290, illus., diags. 15s.
Provides a fund of valuable information for cabinet-making apprentices. The sections dealing with the practical use and care of tools should be of exceptional value. B

678 Rubber

- WAKE, W. C. 551
The analysis of rubber and rubber-like polymers. MacLaren, 1958. pp.x,237, plates, tables, diags., bibliog. 50s. *R.A.B.R.M. Manual no. 3*. C

69 BUILDING

- EASTWICK-FIELD, J. and STILLMAN, J. 552
The design and practice of joinery; foreword by R. H. Matthew; drawings by R. Maguife. Architectural P., 1958. pp.222, illus., tables, diagrs., bibliog. 42s.
The only authoritative up-to-date book on joinery practice in building. Well written and illustrated. A very necessary help for the many architects now interested in the increased use of wood. B

7 FINE ARTS

742 Perspective

- MYERSCOUGH-WALKER, R. 553
The perspectivist. Pitman, 1958. pp.xiv,266, illus., plates, diagrs. 60s.
An excellent and entertaining book in which the principles of perspective drawing are set out in a practical form with many explanatory illustrations. B

77 PHOTOGRAPHY

- THOMSON, C. L. 554
Colour films: the technique of working with colour materials. London, N.Y., Focal P., 1958. pp.289, illus., tables, diagrs. 42s. or \$5.88. *Manual of photo-technique*.
A practical manual for professional and advanced amateur photographers. B

Publishers

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A & U	Allen & Unwin
C & H	Chapman and Hall
CUP	Cambridge University Press
EUP	English Universities Press
HMSO	Her Majesty's Stationery Office
McG-H	McGraw-Hill
O & B	Oliver and Boyd
OUP	Oxford University Press
ULP	University of London Press

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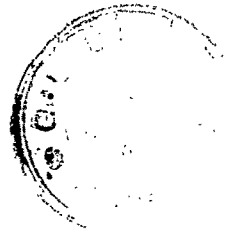
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British broadcasting: a bibliography. BBC, 1958. pp.iii,49. 5s. D
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Serial publications of the Soviet Union, 1939-1957: a bibliographic checklist
comp. by Rudolf Smits. Washington, the Library, 1958. pp.ix,459. \$2.75.
Available through U.S. Government Printing Office or HMSO. D

02 LIBRARIANSHIP

- FOSKETT, D. J. 557
Information service in libraries. Crosby Lockwood, 1958. pp.ix,142. 13s. 6d.
Crosby Lockwood's new librarianship series, 4. B
- INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY. Commission on 558
Codification, Ciphering, and Punched Card Techniques
A proposed international chemical notation. Tentative version, subject to re-
vision. London, N.Y., [etc.], Longmans Green, 1958. pp.vii,165, diags. 35s. C
- JOHNSON, H. W. and MCFARLAND, S. W. 559
How to use a business library, with sources of business information. 2nd ed.
Cincinnati, South-Western Publishing Co., 1957. pp.iv,154. \$1.25. A
- ORGANISATION FOR EUROPEAN ECONOMIC CO-OPERATION. European Produc- 560.
tivity Agency. *Basic Information Section*
Report on the third meeting of technical information officers held at the Comi-
tato Nazionale per la Produttività, Rome, 19th-23rd March 1956. Paris,
OEEC; [London, HMSO], 1958. pp.58. 250 fr. or 4s. *Technical information*
services in Europe. B
- SHERA, J. H. and others 561
Information resources: a challenge to American science and industry, by J. H.
Sera, A. Kent, J. W. Perry; based on the special meeting of the Council on
Documentation Research, February 3-4, 1958, sponsored by Western Reserve
University. Cleveland, Press of Western Reserve University; London, Inter-
science, 1958. pp.xii,214, mimeographed. \$5. B

058 Directories

- THE BRITISH Commonwealth 1958. 2nd ed. Europa, 1958. pp.xv,958, tables, 562
bibliog. 120s.
This is an altogether excellent book, giving full, accurate, and up-to-date political, eco-
nomic, industrial, cultural, scientific, and technical information on all the countries of the
Commonwealth. B

3 SOCIAL SCIENCES

33 ECONOMICS

- COLEMAN, D. C. 563
The British paper industry, 1495-1860: a study in industrial growth. Oxford, Clarendon P., 1958. pp.xvi,367, plates, tables, diags. 55s. C
- DUNNING, J. H. 564
American investment in British manufacturing industry. A & U, 1958. pp.366, tables. 35s.
Written with the help of 200 American-financed firms in this country. Deals with assistance given to post-war economic recovery of Western Europe by private American investment. C
- HABERLER, G. 565
Prosperity and depression: a theoretical analysis of cyclical movements. 3rd ed. A & U, 1958. pp.xviii,521, diags. 28s.
New revised and enlarged edition. C
- LUDWIG, M., ed. 566
The cotton industry in a world economy: official report on the International Cotton Conference held at Venice, Italy, from the 22nd to the 28th September, 1957. Manchester, International Federation of Cotton and Allied Textile Industries, 1958. pp.286, illus., tables. 30s.
Conference papers giving economic statistical information for the world (India, Japan, United States, and particularly Western Europe). A

331 Industrial relations

- ROBERTS, B. C. 567
National wages policy in war and peace. A & U, 1958. pp.180, tables. 15s. B

37 EDUCATION

- MACPHERSON, J. S. 568
Eleven-year-olds grow up. ULP, 1958. pp.xxiii,184, tables, diags. 15s. *Scottish Council for Research in Education. Publication no. 42.*
Follow-up studies of the 1947 Scottish mental survey. B
- VENABLES, E. C. 569
Placement problems in part-time engineering courses. London, Association of Technical Institutions, 1958. pp.20, tables, bibliog. 1s. 3d. *Association of Technical Institutions, publications.* B

5 NATURAL SCIENCES

51 MATHEMATICS

- FULLER, G. 570
Intermediate algebra for colleges. Princeton (N.J.), London, [etc.], Van Nostrand, 1958. pp.vii,258, tables. \$4 or 30s.
A new carefully-written presentation of intermediate algebra, including the theory of logarithms and of quadratic equations in one and in two knowns. B
- SWAINE, K. B. 571
An introductory course in pure mathematics. London, Toronto, [etc.], Harrap, 1958. pp.335, diags. 15s.
Exercises for sixth form course up to advanced and scholarship levels for senior students, based largely on analytical geometry to illustrate principles. B

52 ASTRONOMY

- DUNGEY, J. W. 572
Cosmic electrodynamics. CUP, 1958. pp.ix,183, diags., bibliog. 32s. 6d. *Cambridge monographs on mechanics and applied mathematics. Gen. eds. G. K. Batchelor and H. Bondi.*
A useful account of the basic theory of the subject which will be of interest to nuclear scientists, geophysicists, and astrophysicists. C
- INTERNATIONAL ASTRONOMICAL UNION 573
Apparent places of fundamental stars 1959; containing the 1535 stars in the Third Fundamental Catalogue (FK3) of the *Berliner Jahrbuch*. Produced by international co-operation under the auspices of the International Astronomical Union. HMSO by order of the Lords Commissioners of the Admiralty, 1958. pp.xi,536, tables. 42s. D

53 PHYSICS

- EVERDELL, M. H. 574
Fundamental thermodynamics for engineers. EUP, 1958. pp.xii,201, tables, diags. 25s. *General engineering series. Gen. ed. D. G. Christopherson.*
This book, intended for the engineering student, is an admirable introduction to the study of thermodynamics. B
- GIBSON, A. F., ed. 575
Progress in semiconductors; vol. 3. Heywood, 1958. pp.vii,210, diags., plates, bibliog. 55s.
Important papers on magneto resistance, scattering processes, the chemical purification of germanium and silicon, and of many other current research topics. Shows the same discriminating selection and high standard of accuracy which distinguished preceding volumes. C
- PAGE, L. and ADAMS, N. I. 576
Principles of electricity: an intermediate text in electricity and magnetism. 3rd ed. Princeton (N.J.), [etc.], London, Van Nostrand, 1958. pp.xiii,533, illus., diags. \$7 or 52s. 6d.
Intermediate text presupposing knowledge of calculus. Basic concepts are developed in terms of electrical measurement. Full and clear treatment. B
- PARKIN, P. H. and HUMPHREYS, H. B. 577
Acoustics, noise, and buildings; with a foreword by H. Bagenal. Faber, 1958. pp.331, plates, tables, diags. 70s.
A comprehensive and reliable book, the product of a successful research partnership between a well-known acoustical physicist and an experienced architect. C
- SHEPHERD, A. A. 578
An introduction to the theory and practice of semiconductors. Constable, 1958. pp.206, diags., bibliogs. 18s. 6d.
An introduction to the theory and technology of semiconducting materials for advanced students of physics. B

539.1 Atomic energy

- ARGONNE NATIONAL LABORATORY 579
Nuclear reactor experiments; ed. by J. Barton Hoag. Princeton (N.J.), [etc.], London, Van Nostrand, 1958. pp.xv,480, illus., tables, diags., bibliog. \$6.75 or 51s.

The basic theory, equipment, and methods of forty-nine experiments used for instruction at the Argonne National Laboratory, covering a wide field, including fuel preparation and processing. B-C

- GLASSTONE, S. 580
Sourcebook on atomic energy. 2nd ed. Princeton (N.J.), [etc.], London, Van Nostrand, 1958. illus., tables, diags. 34s.

Thoroughly revised and brought up to date to include information made available in eight years since publication of the first edition. B

- MATHER, K. B. and SWAN, P. 581
Nuclear scattering. CUP, 1958. pp.viii,469, tables, diags., bibliog. 80s.

A highly important, advanced book dealing authoritatively with nuclear scattering and the techniques of its investigation. Mr Mather is a senior research officer of the Australian Atomic Energy Commission and Dr Swan a lecturer in physics at Melbourne University. C

54 CHEMISTRY

- BAMFORD, C. H. and others, eds. 582
The kinetics of vinyl polymerization by radical mechanisms. London, Butterworth; N.Y., Academic P., 1958. pp.xii,318, diags., bibliogs. 50s. or \$8.80.

A book for the student as well as the specialist. It is a critical summary of knowledge in this field, with many literature references up to 1957. C

- BECHER, P. 583
Emulsions theory and practice. N.Y., Reinhold; London, C & H, 1958. pp.ix, 382, illus., diags., bibliogs. \$35 or 100s. *American Chemical Society monograph series.*

An attractively written and well-documented up-to-date account of the subject matter. There is rather more about theory and the results of fundamental research than about practical applications. Useful to chemists requiring information on either aspect. B

- HATCH, L. F. 584
Higher oxo alcohols. N.Y., Wiley; London, C & H, 1957. pp.ix,120, illus., tables, diags., \$4.50 or 36s. B

- MEGSON, N. J. L. 585
Phenolic resin chemistry. Butterworths, 1958. pp.vii,323, plate, tables, diags., bibliog. 65s.

An extremely well-informed world-wide survey of investigation in phenolic resin chemistry since 1939. C

- SNEED, M. C. and BRASTED, R. C. 586
Comprehensive inorganic chemistry: vol. 7; the elements and compounds of group IVa. H. P. Klug and R. C. Brasted. N.Y., London, [etc.], Van Nostrand, 1958. pp.ix,302, illus., tables, diags. 56s. 6d. *Comprehensive inorganic chemistry.*

The chemistry and technology of the elements of group 4a and their compounds are presented in a brief and concise manner. The text is supported by fairly numerous references. B

551.5 Meteorology

HALTINER, G. J. and MARTIN, F. L. 587
Dynamical and physical meteorology. N.Y., London, McG-H, 1957. pp.xi,470.
\$10 or 77s. B

MASSEY, H. S. W. and BOYD, R. L. F. 588
The upper atmosphere. Hutchinson, 1958. pp.xii,333, plates, diags., bibliog.
63s.

An excellent, readable, and authoritative work which is strongly recommended to all geophysicists and others interested in the upper atmosphere. C

SUTCLIFFE, R. C., ed. 589
Polar atmosphere symposium; part 1. Meteorology section: symposium at Oslo 2-8 July 1956. London, N.Y., [etc.], Pergamon P., 1958. pp.xi,341, plates, tables, diags., bibliog. 70s. *Agardograph 29, part 1.*

Record of a symposium convened by the Advisory Group for Aeronautical Research and Development of NATO to review recently gathered knowledge and exchange views as to the interpretation of results. C

57 BIOLOGY

EDDY, B. P., ed. 590
The microbiology of fish and meat curing brines: proceedings of the second international symposium on food microbiology, held at Cambridge in April 1957. HMSO, 1958. pp.vi,336, plates, tables, diags., bibliog. 45s. *Great Britain. Food Investigation Board publications.*

A second symposium held at the Low Temperature Research Station, Cambridge, three years after its forerunner at Lille. It comprises thirty-eight papers, mainly in English, of a very practical nature by scientists from important research stations, academic and industrial, at home and abroad. C

ELTON, C. S. 591
The ecology of invasions by animals and plants. Methuen, 1958. pp.181, illus., plates, diags., bibliog. 30s. B-C

SINNOTT, E. W. and others 592
Principles of genetics. 5th ed. by E. W. Sinnott, L. C. Dunn, T. Dobzhansky. N.Y., [etc.], London, McG-H, 1958. pp.xiv,459, illus., diags., bibliog. \$6.75 or 52s. 6d.

A brilliantly written complete revision of a standard textbook incorporating much new material in an exceedingly attractive and compact new format. B-C

SMITH, J. M. 593
The theory of evolution. Penguin, 1958. pp.320, diags., tables, bibliog. 3s. 6d. *Pelican biology series, no. A433.*

A well-balanced account of the modern theory of evolution, for the non-specialist. B

WILLMER, E. N. 594
Tissue culture: the growth and differentiation of normal tissues in artificial media. 3rd ed. Methuen, 1958. pp.xx,191, plates, diags. 12s. 6d. *Methuen's monographs on biological subjects. Gen. ed. M. Abercrombie.*

Recent work has been incorporated into the text of this book so as to make it more useful as an introduction to the subject. C

577.1 Biochemistry

- LATARJET, R. *and others* 595
 Organic peroxides in radiobiology (*Les peroxydes organiques en radiobiologie*); gen. ed. M. Haissinsky. London, [etc.], Pergamon P., 1958. pp.vii,153, tables, diagsr. 60s.
 A permanent record of the proceedings of a colloquium held in Paris in 1957 to discuss the organic peroxides formed by radiations and the role played by these materials in radiobiology. Contributions in English and French. C
- SHEMIN, D., *ed.* 596
 Biochemical preparations; vol. 5. N.Y., Wiley; London, C & H, 1957. pp.ix,115, diagsr., bibliogs. 38s.
 Twenty-eight detailed preparations and separations of compounds of biochemical interest are given. They have been submitted by various workers and each one checked. An authoritative work. C
- STRONG, F. M. 597
 Topics in microbial chemistry: antimycin, coenzyme A, kinetin, and kinins. N.Y., Wiley; London, C & H, 1958. pp.xi,166, illus., diagsr., bibliogs. \$5 or 40s.
E. R. Squibb lectures on chemistry of microbial products.
 An account of the chemistry and biological properties of antimycin, coenzyme A and related compounds, and kinetin. C

59 ZOOLOGY

- MATTINGLY, P. F. 598
 The culicine mosquitoes of the Indomalayan area; part 3: Genus *Aedes* Meigen, subgenera *Paraedes* Edwards, *Rhinoskusea* Edwards, and *Cancraedes* Edwards. British Museum (Natural History), 1958. pp.61, illus., diagsr., bibliog. 12s.
 Third of a series of papers embodying a revision of the culicine mosquitoes of the Indomalayan area. Consists of keys and descriptions of species, with illustrations and a section on zoogeography. B
- WEICHERT, C. K. 599
 Anatomy of the chordates. 2nd ed. N.Y., [etc.], London, McG-H, 1958. pp.899, illus. \$9.50 or 74s. B-C

6 APPLIED SCIENCES

62 ENGINEERING

- MANTELL, C. L., *ed.* 600
 Engineering materials handbook: prepared by a staff of specialists. N.Y., [etc.], London, McG-H, 1958. pp.1828, illus. \$21.50 or 167s.
 In spite of the emphasis on American data, much of the information included is of great potential value to engineers, designers, architects, metallurgists. D
- BOLZ, R. W., *ed.* 621 Mechanical engineering 601
 Metal engineering processes: sponsored by the Metals Engineering Handbook Board [of] the American Society of Mechanical Engineers. N.Y., [etc.], London, McG-H, 1958. pp.xv,428, illus., tables, diagsr. \$13.50 or 104s. *American Society of Mechanical Engineers, handbooks.* B
- HAMMOND, R. 602
 Water power engineering: and some electrical problems; with a foreword by H. D. Morgan. Heywood, 1958. pp.xvi,302, illus., tables, diagsr., bibliog. 50s.
 This new book is descriptive of current practice in hydro power development in Britain and also abroad. A

621.3 Electrical engineering

- ALDOUS, W. H. and APPLETON, Sir E. 603
Thermonic vacuum tubes and their applications: 7th ed. London, Methuen; N.Y., Wiley, 1958. pp.vii,162, diagrs., bibliogs. 11s. 6d. *Methuen's monographs on physical subjects. Gen. ed. B. L. Worsnop.*
Some additional material on thermonic cathodes and transit time valves. B
- CAMM, F. J. 604
A beginner's guide to television: an elementary course in fifteen lessons. Newnes, 1958. pp.126, illus., diagrs. 7s. 6d.
Fifteen articles from the journal *Practical Television*, gathered into book form, forming a general elementary introduction to the whole subject. A
- WATTS, J. L. 605
Electrical maintenance and repairs. Cleaver-Hume, 1958. pp.324, diagrs., tables. 21s. *Cleaver-Hume electrical series no. 8. Gen. ed. H. Cotton.*
This little book should be very useful to maintenance personnel responsible for smooth running of electrical equipment. B
- WELCH, G. B. 606
Wave propagation and antennas. Princeton (N.J.), [etc.], London, Van Nostrand, 1958. pp.viii,257, diagrs., bibliog. \$4.95 or 43s. 6d.
An introduction to the subject based on a series of lectures given to first-year students and assuming only elementary physics and mathematics. The properties of wave motions and of antennas are discussed as are wave guides, radar, and radio-astronomy. B

622 Mining

- MCADAM, R. and WESTWATER, R. 607
Mining explosives. Edinburgh, London, O & B, 1958. pp.vii,187, diagrs. 21s.
This is a well-written and comprehensive treatise on the subject of mining explosives and blasting practice in mines and quarries. It will be most useful as a textbook for mining students. B
- ROBERTS, A. 608
Underground lighting in mines, shafts, and tunnels. Technical P., 1958. pp.xii, 292, plates, tables, diagrs., bibliog. 63s.
A clearly-written, very comprehensive, excellently illustrated, and fully documented book, about the best likely to appear on its subject for some time. The author is the Director of the Postgraduate School of Mining, University of Sheffield. B-C

64 CATERING

- GREAT BRITAIN. Ministry of Health. *Department of Health for Scotland* 609
Clean catering: a handbook on premises, equipment, and practices for the promotion of hygiene in catering establishments. HMSO, 1958. pp.iv,64, illus., plates. 3s. 6d.
An excellent guide to the establishment and maintenance of hygienic conditions in catering, giving practical advice on all aspects of the layout of premises and the organization of work. A

65 COMMUNICATIONS, COMMERCE, and ORGANIZATION

- MCKEAN, R. N. 610
Efficiency in government through systems analysis: with emphasis on water resources development: a Rand Corporation research study. N.Y., Wiley; London, C & H, 1958. pp.x,336, tables, bibliog. \$8 or 64s. *Publications in operations research.*
The use of quantitative analysis in civil government investments and operations, sponsored by the Rand Corporation as part of its contribution to operations research. Examples are drawn from water resources development. C

- VAZSONYI, A. 611
 Scientific programming in business and industry. N.Y., Wiley; London, C & H, 1958. pp.xix,474, diagsr. \$13.50 or 108s.

A mathematical attempt to solve the production problems of linear programming, operations research, and statistical decision theory. C

658 Industrial management

- BRITISH INSTITUTE OF MANAGEMENT 612
 Research: a signpost to better management; report of the twelfth national conference held at Bournemouth on 6-8 November, 1957. London, the Institute, 1958. pp.vii,239. 21s. B

- DAVISON, J. P. *and others* 613
 Productivity and economic incentives. A & U, 1958. pp.307, tables. 35s.
 Based on research sponsored by D.S.I.R., M.R.C., and Joint Committee on Human Relations. C

- KARGER, D. W. *and* BAYHA, F. H. 614
 Engineered work measurement: the principles, data, and techniques of methods-time measurement, modern time and motion study, and related applications engineering data. N.Y., Industrial P.; Brighton, Machinery Publishing Co., 1957. pp.xii,635, illus., tables, diagsr., bibliog. \$12 or 110s.
 Covers all the essential principles of methods-time-measurement and modern time and motion study with emphasis on the former. A-B

- RAUTENSTRAUCH, W. *and* VILLERS, R. 615
 The economics of industrial management. 2nd ed., rev. by R. Villers. N.Y., Funk & Wagnalls; [London, Mayflower], 1957. pp.xxii,488, tables, diagsr. 60s.
 The authors substantiate, with additional material collected since the first edition of this book in 1949, their contention that the linear relationship of the profit and loss chart is a reliable standard of measurement for the purpose of effective profit control. B

66 CHEMICAL TECHNOLOGY

- CARROLL-PORCZYNSKI, C. Z. 616
 Inorganic fibres. National Trade P., 1958. pp.xii,353, illus., diagsr., bibliogs. 57s. 6d.

The first adequate summary of the greatly extended industrial application of inorganic fibres since the war. It includes also, for the advanced worker, excellent bibliographies and a review of the important post-war patents. C

- COLLIER, C. H., *ed.* 617
 Catalysis in practice: a collection of papers originally presented in Philadelphia, Pa, in April 1957, under the auspices of the Philadelphia-Wilmington Section of the American Institute of Chemical Engineers and the School of Chemical Engineering, University of Pennsylvania. N.Y., Reinhold; London, C & H, 1957. pp.v,153, diagsr., bibliogs. \$3.95 or 32s.

This little book deals, in an introductory manner in seven short chapters, with some of the process aspects of catalysts including selection, preparation, catalyst systems, economics, operation, and future trends. B

- ECKMAN, D. P. 618
 Automatic process control. N.Y., Wiley; London, C & H, 1958. pp.vii,368, diagsr. \$9 or 72s.

Introduction to the principles of automatic control with particular regard to process analysis. For the undergraduate engineer. B

Publishers

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A & U Allen & Unwin
C & H Chapman and Hall
CUP Cambridge University Press
EUP English Universities Press
HMSO Her Majesty's Stationery Office
McG-H McGraw-Hill
O & B Oliver and Boyd
OUP Oxford University Press
ULP University of London Press

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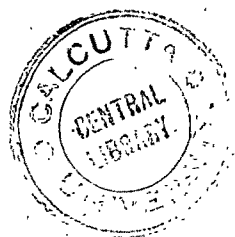
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British standard for transliteration of Cyrillic and Greek characters. London, the Institution, 1958. pp.23, tables, 12s. 6d. *B.S. 2979:1958.*
Gives alternative tables for British and international use. *D*
- PIPER, H. D. and DAVIE, F. E. 620
Guide to technical reports. N.Y., Reinhart, 1958. pp.xi,83, illus., diagrs. \$1. *Reinhart English pamphlets.*
Instructions for weekly technical reports. *B*

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- BLANCHARD, J. R. and OSTVOLD, H. 621
Literature of agricultural research. Berkeley, University of California P.; London, CUP, 1958. pp.x,231. \$5 or 37s. 6d. *California University bibliographical guides, no. 1.*
A classified list of books, periodicals, and standard reference works in agriculture and related subjects such as food and nutrition. *D*
- TAYLOR, A. R., comp. 622
A concise guide to *Teach yourself*; with a foreword by R. Calder. London, EUP, 1958. pp.xii,196, illus., facsim. 2s. *D*

159.9 Psychology

- BROADBENT, D. E. 623
Perception and communication. London, N.Y., [etc.], Pergamon P., 1958. pp.v,338, bibliog. 55s. or \$8.50.
Surveys recent experiments on attention, fatigue, and distraction in tasks demanding response to visual or auditory signals, and offers theoretical interpretations of the findings. *C*
- WELFORD, A. T. 624
Ageing and human skill: a report centred on work by the Nuffield Unit for research into problems of ageing. OUP for the trustees of the Nuffield Foundation, 1958. pp.vi,300, tables, diagrs., bibliog. 25s.
A summary report of detailed experimental studies of the effects of ageing on the component processes of skilled work. An important book for serious students and research workers in this field. *C*

3 SOCIAL SCIENCES

37 EDUCATION

- BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE 625
Science in schools: proceedings of a conference under the auspices of the British Association for the Advancement of Science held on April 17th and 18th, 1958, at the Royal Geographical Society, London, S.W.7; ed. with postscript by W. H. Perkins. Butterworths Scientific Publications, 1958. pp.viii,150. 15s. *B*

- BRUFORD, R. 626
Teaching mime. Methuen, 1958. pp.235. 15s.
A practical textbook. A
- CURTIS, S. J. 627
An introduction to the philosophy of education: with a foreword by W. Walsh.
University Tutorial P., 1958. pp.viii,228, bibliog. 12s. 6d. B
- DENT, H. C. 628
Secondary modern schools: an interim report. Routledge & K. Paul, 1958.
pp.xvi,207. 15s.
Based on numerous visits to different types of secondary modern school. A
- NATIONAL UNION OF TEACHERS 629
Inside the comprehensive school: a symposium contributed by heads of comprehensive schools in England and Wales, collected and edited by the National Union of Teachers. Schoolmaster, 1958. pp.235, plates, bibliog. 12s. 6d. B
- NATIONAL UNION OF TEACHERS. *Consultative Committee* 630
The curriculum of the junior school: report of a consultative committee appointed by the Executive of the National Union of Teachers. Schoolmaster, 1958. pp.188, bibliog. 7s. 6d. B
- PEERS, R. 631
Adult education: a comparative study. London, Routledge & K. Paul; N.Y., Humanities P., 1958. pp.xiv,365, bibliog. 35s. *International library of sociology and social reconstruction*, ed. by W. J. H. Sprott.
A historical survey of adult education in England and Wales, with chapters dealing with adult education in other countries. B
- SOFER, C. and HUTTON, G. 632
New ways in management training: a technical college develops its services to industry; foreword by W. R. Hawthorne. Tavistock, 1958. pp.xii,127, tables, bibliog. 15s.
An examination of the state of managerial studies in Britain. B

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51 MATHEMATICS

- GOLDBERG, S. 633
Introduction to difference equations; with illustrative examples from economics, psychology, and sociology. N.Y., Wiley; London, C & H, 1958. pp.xii, 260, tables, diags., bibliog. 54s. C
- HUREWICZ, W. 634
Lectures on ordinary differential equations. N.Y., Wiley; London, C & H, 1958. pp.xvii,122, diags., bibliog. \$5 or 40s.
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Mathematics of physics and modern engineering. N.Y., [etc.], London, McG-H, 1958. pp.ix,810, diags. 74s. B

52 ASTRONOMY

527 Navigation

- GARDNER, A. C. 636
 Teach yourself navigation. EUP, 1958. pp.vii,192, tables, diagrs., bibliog. 6s.
Teach yourself books, ed. by L. Cutts.
 An excellent simple introduction to the theory, principles, and practice of navigation, with particular emphasis on navigation at sea. Intended for the general reader. A-B
- WATERS, D. W. 637
 The art of navigation in England in Elizabethan and early Stuart times; with a foreword by the Earl Mountbatten of Burma. Hollis & Carter, 1958. pp.xxxix, 696, plates, diagrs., bibliog. 84s.
 Authoritative, detailed, yet eminently readable account of a formative period in the art of ocean navigation. A

53 PHYSICS

- CHILDS, W. H. J. 638
 Physical constants: selected for students. 8th ed. London, Methuen; N.Y., Wiley, 1958. pp.viii,79, tables. 8s. 6d. *Methuen's monographs on physical subjects, ed. by B. L. Worsnop.*
 Last rev. ed. 1951. A pocket-size reference book for students of G.C.E.(A) and National Certificate endorsements. B
- JACOBSEN, L. S. and AYRE, R. S. 639
 Engineering vibrations with applications to structures and machinery. N.Y., [etc.], London, McG-H, 1958. pp.xii,564, tables, diagrs., bibliogs. 77s. 6d. *McGraw-Hill series in mechanical engineering.*
 An introduction to the mathematical analysis of vibrations of linear and non-linear systems intended for advanced students in technical colleges. C
- REID, R. C. and SHERWOOD, T. K. 640
 The properties of gases and liquids: their estimation and correlation. N.Y., [etc.], London, McG-H, 1958. pp.xii,386, tables, diagrs., bibliog. \$10 or 77s. 6d.
 Deals with the quantitative estimation of certain properties, deduced from the experimental determination of other properties; and discusses the basis, validity, and limitations of such methods. Of value to chemical engineers, chemists, and physicists. B
- STEPHENSON, G. and KILMISTER, C. W. 641
 Special relativity for physicists. Longmans Green, 1958. pp.108, diagrs., bibliog. 18s.
 A concise introduction suitable for physics and mathematics students. Three-dimensional vector analysis is used and difficult mathematical methods are avoided. Numerous applications, especially to modern particle physics, are discussed. B
- TAYLOR, Sir G. I. 642
 The scientific papers of Sir Geoffrey Ingram Taylor, Fellow of Trinity College, Cambridge, Fellow and formerly Yarrow Research Professor of the Royal Society; ed. by G. K. Batchelor, vol. I, mechanics of solids. CUP, 1958. pp.x, 593, plates, tables, diagrs. 75s.
 One of four volumes. B-C

54 CHEMISTRY

- BASOLO, F. and PEARSON, R. G. 643
 Mechanisms of inorganic reactions: a study of metal complexes in solution.
 N.Y., Wiley; London, C & H, 1958. pp.xiii,426, illus., tables, diagrs., bibliog.
 94s.
 Stereochemistry of co-ordination compounds and kinetic studies of their reactions in
 solution. C
- BRITISH DRUG HOUSES LTD. *Laboratory Chemicals Division* 644
 The B.D.H. book of organic reagents. 10th ed. Poole (Dorset), British Drug
 Houses, 1958. pp.[6],182, tables, diagrs., bibliog. 18s. D

55 GEOLOGY

- GROVES, A. W. 645
 Gypsum and anhydrite. HMSO, 1958. pp.iv,108, tables, bibliogs. 7s. 6d. *Over-
 seas Geological Surveys. Mineral Resources Division*
 A comprehensive book dealing with the occurrence and industrial uses of two important
 non-metalliferous minerals. A
- GUILCHER, A. 646
 Coastal and submarine morphology; tr. from the French by B. W. Sparks and
 R. H. W. Kneese. Methuen, 1958. pp.274, plates, diagrs., bibliog. 30s.
 A very readable translation of the 1954 French edition extensively revised for the occasion.
 The author is a Professor at the Sorbonne and a geographer of internationally acknow-
 ledged scholarship and originality. B-C

57 BIOLOGY

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 Principles of field biology and ecology. N.Y., London, [etc.], McG-H, 1958.
 pp.vii,341, illus., plate, bibliogs. \$6.50 or 50s. 6d.
 A very full introduction to field biology, which emphasizes the dynamic aspects of ecology
 and reflects the modern emphasis on training in scientific method. B
- WADDINGTON, C. H. 648
 The strategy of the genes: a discussion of some aspects of theoretical biology;
 with appendix by H. Kacser. A & U, 1958. pp.ix,262, illus., tables, diagrs.,
 bibliog. 28s.
 Consists of six essays. Concerned firstly with 'the nature of the organization of biological
 processes which results in living things having definite and characteristic structures',
 secondly with evolution. B

6 APPLIED SCIENCES

614 Public Health

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 Fall out: radiation hazards from nuclear explosions; gen. ed. A. Pirie, foreword
 by Bertrand Russell. Rev. ed. including report on the Windscale disaster and
 an analysis of the United States Congress report on radioactive fall out and its
 effects in man. MacGibbon & Kee, 1958. pp.176, maps, tables, diagrs., bibliog.
 12s. 6d.
 Emphasis is on social and political aspects. A

- WORLD HEALTH ORGANIZATION 650
 International standards for drinking-water. Geneva, W.H.O.; [London, HMSO], 1958. pp.152, tables, bibliog. *Sw.fr.* 12, 20s., or \$4.
 Compiled by a panel of experts, giving standards required for pure drinking-water and laboratory methods for assessing them. A useful, practical guide for laboratory technicians. *B*

62 ENGINEERING

621 Mechanical engineering

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 Pump operation and maintenance. N.Y., London, McG-H, 1958. pp.325, illus. \$9 or 50s.
 A practical book for the maintenance engineer. *B*

- HOLZBOCK, W. G. 652
 Automatic control: principles and practice. N.Y., Reinhold; London, C & H, 1958. pp.vii,258, illus., diags. \$7.50 or 60s.
 The author is Chief Engineer of an American company manufacturing control gear and the book covers principally American practice and mechanical systems. *B*

624 Civil engineering

- EVANS, R. H. and BENNETT, E. W. 653
 Pre-stressed concrete: theory and design. C & H, 1958. pp.xv,294, illus., plate, tables, diags., bibliog. 60s.
 Written from the research rather than the practical angle. Deals largely with the analysis and design of simply supported beams with one part devoted to special problems. *B*
- LELIAVSKY, S. 654
 Uplift in gravity dams: calculation methods, experiments and design theories. Constable, 1958. pp.viii,267, illus., diags. 45s.
 Discusses theories and experiments concerned with uplift, with a concluding chapter on methods of reducing uplift and leakage in gravity dams. *C*
- ORCHARD, D. F. 655
 Concrete technology; vol. I, properties of materials. Contractors Record, 1958. pp.348, plate, tables, diags., bibliog. 45s.
 Discusses types of cement, additives, aggregates, lightweight concrete, deterioration of concrete, and its resistance to chemical attack. *B*

629 Transport engineering

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 2000 fathoms down; tr. from the French by M. Bullock. Penguin, 1958. pp.233, plates, diags., 3s. 6d.
 First published 1955. A translation of the author's *Le Bathyscaphe*, describing the early trials up to the first manned descent to 4030 metres. A graphic and exciting account of an expertly engineered project. *A*
- NEWTON, K. and STEEDS, W. 657
 The motor vehicle: a textbook for students, draughtsmen, and owner-drivers. 6th ed. London, Iliffe; Philadelphia, Chilton, 1958. pp.viii,684, illus., diags. 45s.
 A textbook containing a great deal of information on motor-car construction and primarily published for students and apprentices in the automobile industry. *B*

65 COMMUNICATIONS, COMMERCE, and ORGANIZATION

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- PECK, L. G. and HAZELWOOD, R. 659
Finite queuing tables. N.Y., Wiley; London, C & H, 1958. pp.xvi,210, tables. 68s. *Operations Research Society of America, publications in operations research, no. 2.* D

651/652 Office management

- OFFICE MANAGEMENT ASSOCIATION 660
Office administration; ed. by G. Mills and O. Standingford. Pitman, 1958. pp.x,249. 25s. B

655 Printing, publishing, book trade

- SHEPHERD, E. G. 661
Typography for students. Macdonald & Evans, 1958. pp.xiii,223, illus., tables, diags. 15s.
Primarily for those wishing to sit for the City & Guilds of London's Intermediate examination in typography. B

- WELLS, F. A. 662
Productivity in a printing firm. Duckworth, 1958. pp.148, tables, diagr. 21s. B

658 Industrial management

- BULLINGER, C. E. 663
Engineering economy. 3rd ed. N.Y., [etc.], London, McG-H, 1958. pp.xi,379, illus., tables, diags., bibliog. 54s. 6d.
For the industrial engineer. Covers problems such as costs, making of decisions, financial analysis, comparison of alternatives, break-even charts, etc. B

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Evaluation interview: predicting job performance in business and industry. N.Y., London, McG-H, 1958. pp.288, illus. \$6 or 46s. 6d.
This book is based on American experience, but contains much that can usefully be applied everywhere. A

- HENDERSON, J. M. 665
The efficiency of the coal industry: an application of linear programming. Cambridge (Mass.), Harvard U.P.; London, OUP, 1958. pp.xiii,146, tables, diags., bibliog. 36s. *Harvard economic studies, vol. 103.* C

- THE SOCIETY OF INSTRUMENT TECHNOLOGY 666
Automatic measurement of quality in process plants: proceedings of a conference held at Swansea, 23-26 September, 1957, by the Society. London, Butterworths; N.Y., Academic P., 1958. pp.xi,320, illus., diags., bibliogs. 50s. or \$9.50.

Presents the twenty-six papers delivered at the conference. C

SYMPOSIUM ON EXPERIMENTAL DESIGNS IN INDUSTRY, 1956. *North Carolina State College* 667

Experimental designs in industry: a symposium held on November 5-9, 1956, at North Carolina State College, conducted by the Institute of Statistics. N.Y., Wiley; London, C & H, 1958. pp.xi,268, tables, diags., bibliog. 48s. *Wiley publications in applied statistics, ed. by W. A. Shewhart and others.* C

66 CHEMICAL TECHNOLOGY

GUNTHER, R.

668

Glass-melting tank furnaces: tr. from the German by J. Currie; with a foreword by W. E. S. Turner. Sheffield, Society of Glass Technology, 1958. pp.xiv,232, plate, tables, diags., bibliog. 60s.

The German ed., originally published in 1954, has already become a standard text. This English version has been slightly enlarged and altered to conform with British practice. C

67/68 MANUFACTURES

678 Rubber

BATTISTA, O. A.

669

Fundamentals of high polymers. N.Y., Reinhold; London, C & H, 1958. pp. 140, illus., plate, tables, diags., bibliog. \$5.50 or 44s.

An elementary textbook of high polymer science for undergraduate students. It is written simply with an extensive coverage of the basic principles. B

TRELOAR, L. R. G.

670

The physics of rubber elasticity. 2nd ed. OUP, 1958. pp.342, plate, diags., bibliog. 40s. *Monographs on the physics and chemistry of materials. Gen. eds. Willis Jackson, H. Fröhlich, N. F. Mott, E. C. Bullard.*

Complete revision and rearrangement of the standard monograph on the statistical-thermodynamic theory of rubber elasticity. C

681 Fine mechanisms

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671

Business electronics reference guide; vol. 4; P. Courtney ed. N.Y., the Foundation, 1958. pp.v,602. \$6.

Includes details of manufacturers, users, and equipment, as well as a full bibliography. D

MURPHY, J. S.

672

Basics of digital computers. N.Y., Rider, 1958. various paging, illus., diags. 3 v. \$2.50 each.

An easily understandable introduction to the subject where pictorial analogy is extensively used with good effect. A

PEARSON, E. B.

673

Technology of instrumentation. EUP, 1958. pp.xvi,17-202, diags., bibliog. 25s. *Applied physics guides.*

Intended for the technologist or physicist without special training in measurement and control principles. C

674

PUNCH card machine accounting and data processing semi-annual; a business publication dedicated to the advancement and enlightenment of the science of punched card accounting, and electronic and integrated data processing; vol. 7. Detroit, Gille Associates, 1958. pp.171, illus., tables, diags. \$9. B

- SUSSKIND, A. K., *ed.* 675
Notes on analog-digital conversion techniques; prep. by staff members of the Servomechanism Laboratory, Department of Electrical Engineering, Massachusetts Institute of Technology. Cambridge (Mass.), Technology P.; N.Y., Wiley; London, C & H, 1958. Various paging, illus., diags. \$10 or 80s.
A practical and theoretical textbook for the systems engineer. B

69 BUILDING

- DE MARE, E., *ed.* 676
New ways of building. 3rd ed. Architectural P., 1958. pp.262, illus., tables, diags., bibliog. 45s. B
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Applied building construction: a second year course. C & H, 1958. pp.viii, 128, tables, diags., bibliogs. 25s.
Foundations, walls, floors, chimneys, roofs, windows, doors, stairs, plumbing, and finishes are considered in detail. B
- MERRITT, F. S., *ed.* 678
Building construction handbook. N.Y., London, McG-H, 1958. pp.887, illus. \$15 or 116s. 6d. *McGraw-Hill handbooks.*
The volume is divided into sections, each dealing with one aspect of building and with its own bibliography. A useful reference book. D
- RAAFAT, A. A. 679
Reinforced concrete in architecture. N.Y., Reinhold; London, C & H, 1958. pp.240, illus. \$15 or 120s. C

7 FINE ARTS

- HOUGHTON, P. S. 680
Engineering drawing and drawing office practice. 2nd rev. ed. Crosby Lockwood, 1958. pp.xxxi,277, illus., plates, tables, diags. 20s.
The 30 pp. supplement comments on the specification and extends the text where necessary. Whilst noting some of the recommendations the author questions their practical utility and time may prove him correct. The book is otherwise little altered. B
- OLDER, J. C. 681
Learning metalwork with aluminium. Temple P., 1958. pp.viii,183, illus., tables, diags., bibliog. 12s. 6d.
Based on industrial experience and teaching in grammar school and evening institute. B

72 ARCHITECTURE

- MILLS, E. D., *ed.* 682
Architects' detail sheets, 4th series. London, Iliffe for *The Architect and Building News*; N.Y., Philosophical Library, 1958. pp.230, illus., diags. 30s.
In eight sections: balconies, entrances and shop fronts, fireplaces, fittings, staircases, wall details, windows, and miscellaneous. B
- WILLIAMS, W. R. *and others* 683
Recreation places: with contributions by Ray McCombs [and others] and essays defining recreation by David Abrahamsen [and others]. N.Y., Reinhold; London, C & H, 1958. pp.302, illus. \$18 or 144s. B

Publishers

THE FOLLOWING ABBREVIATIONS ARE USED IN ASLIB BOOK-LIST

A & U	Allen & Unwin
C & H	Chapman and Hall
CUP	Cambridge University Press
EUP	English Universities Press
HMSO	Her Majesty's Stationery Office
McG-H	McGraw-Hill
O & B	Oliver and Boyd
OUP	Oxford University Press
ULP	University of London Press

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Official index of rejected and invalid family-group names in zoology; ed. by F. Hemming, assisted by D. Noakes; vol. 1, names 1-273. The Trust, 1958. pp.xiii,38. 15s.
Names are arranged chronologically by ref. to dates of publication of the *Opinions* or *Directions* in which they were placed in the Index. D

- INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE 685
Official list of family-group names in zoology; ed. by F. Hemming, assisted by D. Noakes; vol. 1, names 1-236. The Trust, 1958. pp.xix,38. 15s. D

- INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE 686
Official list of works approved as available for zoological nomenclature; ed. by F. Hemming, assisted by D. Noakes; vol. 1, names 1-38. The Trust, 1958. pp.xi, 12. 7s. 6d. D

- INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE 687
Official index of rejected and invalid works in zoological nomenclature; ed. by F. Hemming, assisted by D. Noakes; vol. 1, names 1-58. The Trust, 1958. pp.xi, 14. 7s. 6d. D

3 SOCIAL SCIENCES

301 Sociology

- CARR-SAUNDERS, Sir A. M. and others 688
A survey of social conditions in England and Wales as illustrated by statistics, by Sir A. M. Carr-Saunders, D. C. Jones, and C. A. Meser. Oxford, Clarendon P., 1958. pp.xxi,302, tables, diags. 25s.
New ed. of *The Social Structure of England and Wales*. B

- STEPHAN, F. F. and MCCARTHY, P. J. 689
Sampling opinions: an analysis of survey procedure. N.Y., Wiley; London, C & H, 1958. pp.xxi,451, tables, bibliog. \$12 or 96s. *Wiley publications in statistics*, ed. by Walter A. Shewhart and others. C

31 STATISTICS

- LOVEDAY, R. 690
A first course in statistics. CUP, 1958. pp.xi,121, tables, diags. 8s. 6d. B

38 TRADE

- REES, H. 691
British ports and shipping; foreword by L. D. Stamp. Harrap, 1958. pp.304, plates, maps, tables. 18s.
A concise account of activities of principal British ports. A

5 NATURAL SCIENCES

53 PHYSICS

- CHURCH, A. H. 692
 Mechanical vibrations. N.Y., Wiley; London, C & H, 1957. pp.xii,275, diags.
 \$6.75 or 54s.
 Basic principles of vibration analysis are discussed with emphasis on their practical applications. Suitable for engineering students. B
- FRANCIS, J. R. D. 693
 A textbook of fluid mechanics for engineering students; with a chapter on gas flow contributed by G. Jackson. Edward Arnold, 1958. pp.viii,332, plates, tables, diags., bibliog. 24s.
 New textbook for first- and second-year undergraduate engineers. Deals mainly with steady flow conditions. Logical treatment with clear mathematical exposition at appropriate level. B
- KNUDSEN, J. G. and KATZ, D. L. 694
 Fluid dynamics and heat transfer. [New ed.] N.Y., [etc.], London, McG-H, 1958. pp.ix,576, illus., tables, diags., bibliog. \$12.50 or 97s. *McGraw-Hill series in chemical engineering*, ed. by S. D. Kirkpatrick. B
- MYERS, W. R. 695
 Theoretical electromagnetism. Butterworths Scientific Publications, 1958. pp. xii,274, tables diags., bibliog. 42s.
 A text for finals of honours degree in physics written with a modern approach and supported by the necessary mathematics and vector bases. Covers electrostatics, magnetostatics, and electromagnetism. Well recommended. B
- PRESENT, R. D. 696
 Kinetic theory of gases. N.Y., [etc.], London, McG-H, 1958. pp.xiv,280, tables, diags., bibliog. \$7.75 or 60s. *International series in pure and applied physics*, ed. by L. I. Schiff. B
- STRONG, J. 697
 Concepts of classical optics; ill. by R. Hayward. San Francisco, Freeman; [London, Bailey & Swinfen], 1958. pp.xxi,692, illus., diags., bibliog. \$9.50 or 80s.
 A well-illustrated textbook of value to students reading physics at general degree level. Topics of lively research interest are treated in sixteen appendices contributed by various authors. B
- TEMPLE, G. 698
 An introduction to fluid dynamics. Oxford, Clarendon P., 1958. pp.xi,195, illus., diags., bibliog. 25s.
 This is a purely theoretical work intended primarily for students reading for honours in mathematics and theoretical physics. C
- VAJDA, S. 699
 Readings in linear programming. Pitman, 1958. pp.vii,99, tables, diags., bibliog. 20s. C

54 CHEMISTRY

LOVELACE, A. M. *and others*

700

Aliphatic fluorine compounds, by A. M. Lovelace, D. A. Rausch, and W. Postelnek. N.Y., Reinhold; London, C & H, 1958. pp.x,370, tables, diagrs., bibliog. \$12.50 or 100s. *American chemical society monograph series, no. 138.*

Comprehensive and critical review of aliphatic fluorine chemistry. Its bibliography contains about 1,500 references and lists many compounds with their method of preparation and their physical properties. C

WALL, F. T.

701

Chemical thermodynamics: a course of study; ill. by E. Gillespie. San Francisco, Freeman; [London, Bailey & Swinfen], 1958. pp.vii,422, tables, diagrs. \$8 or 68s. *Series of chemistry texts ed. by L. Pauling.*

The first, second, and third laws of thermodynamics are adequately covered. The molecular picture is introduced leading to the treatment of statistical mechanics and statistical thermodynamics. B

548 Crystallography

FISHER, J. C. *and others, eds.*

702

Dislocations and mechanical properties of crystals: an international conference held at Lake Placid, September 6-8, 1956; sponsored by Air Force Office of Scientific Research, Air Research and Development Command and the General Electric research laboratory; ed. by J. C. Fisher, W. G. Johnston, R. Thomson, and T. Vreeland. N.Y., Wiley, 1957; London, C & H, 1958. pp.xiv,634, illus., tables, diagrs., bibliog. \$15 or 120s.

Proceedings of a conference covering the principal methods for observing individual dislocations and the complex theory underlying the subject to the limit of its present development. C

55 GEOLOGY

550.3 Geophysics

BENIOFF, H. *and others, eds.*

703

Contributions in geophysics: in honour of Beno Gutenberg; ed. by H. Benioff, M. Ewing, B. F. Howell, and F. Press. London, N.Y., [etc.], Pergamon P., 1958. pp.viii,244, plates, tables, diagrs., bibliog. 60s. or \$9 *International series of monographs on earth sciences: vol. 1, ed. by E. Ingerson.*

Contains absorbing accounts of recent geophysical research, mainly in seismology, contributed by world authorities. C

551.5 Meteorology

GREAT BRITAIN. *Meteorological Office*

704

Tables of temperature, relative humidity, and precipitation for the world. HMSO, 1958.

Part 1. North America, Greenland, and the North Pacific Ocean, pp.84, map, bibliog. 8s. Part 4. Africa, the Atlantic Ocean south of 35°N. and the Indian Ocean, pp.220, map, bibliog. 20s. Part 5. Asia, pp.129, map, bibliog. 12s. Part 6. Australasia and the South Pacific Ocean, pp.54, map, bibliog. 5s. 6d. Parts 2 and 3 will deal with Central and South America, the West Indies and Bermuda, and with Europe and the Atlantic Ocean north of 35°N. The six parts will also be issued as one volume. Of greatest potential value to crop-growers. B-C

PETTERSSSEN, S.

705

Introduction to meteorology. 2nd ed. N.Y., [etc.], London, McG-H, 1958. pp.ix,327, illus., plates, tables, diagrs., bibliog. \$6.75 or 52s. 6d.

A revised, simplified version of the author's *Weather analysis and forecasting.* B

- SCORER, R. S. 706
 Natural aerodynamics. London, [etc.], Pergamon P., 1958. pp.xi,312; plates, diags., bibliog. 60s. or \$9. *International series of monographs on aeronautical sciences and space flight. Division 2: Aerodynamics, vol. 1.*

Non-mathematical discussion of the aerodynamical phenomena of the earth's atmosphere. B

57 BIOLOGY

- CLIFTON, C. E. 707
 Introduction to the bacteria. 2nd ed. N.Y., London, McG-H, 1958. pp.xiv,558, illus. \$7.50 or 58s. B

- DARLINGTON, C. D. 708
 Evolution of genetic systems. 2nd ed., rev. and enl. Edinburgh, London, O & B, 1958. pp.xii,265, tables, diags., bibliog. 21s.

First ed. CUP, 1939. A great deal of very recent information has been added to the original ideas. C

- MCLEISH, J. and SNOAD, B. 709
 Looking at chromosomes. London, [etc.], Macmillan, 1958. pp.vii,88, plates, diags., bibliog. 16s.

An atlas of photographs of stages of the division of somatic and germ cells in the plant *Lilium regale*. B

577.1 Biochemistry

- DIXON, M. and WEBB, E. C. 710
 Enzymes. London, [etc.], Longmans Green, 1958. pp.xxxiii,782, plates, tables, diags., bibliog. 90s.

Deals primarily with general aspects of enzyme science although considerable detailed information on individual enzymes is often given. A great deal of information is presented in an attractive and authoritative manner. C

- FRUTON, J. S. and SIMMONDS, S. 711
 General biochemistry. 2nd ed. N.Y., Wiley; London, C & H, 1958. pp.xii,1077, illus., tables, diags., bibliogs. \$18 or 144s.

First ed. 1953. One of the best full-scale texts on biochemistry with emphasis on chemical, physicochemical, biological, and physical aspects of the subject. Revised and brought up to date. Selection of material references and literary presentation are of high standard. B

- LAIDLER, K. J. 712
 The chemical kinetics of enzyme action. Oxford, Clarendon P., 1958. pp.vii,419, tables, diags., bibliog. 60s.

An authoritative account of the kinetics of enzyme reactions, for biologists and physical chemists. Deals with these reactions generally and also considers a number of specific enzyme systems. C

- NEWTON, H. W. 713
 The face of the sun. Penguin, 1958. pp.208, illus., plates, tables, diags., bibliog. 3s. 6d. *A Pelican book.*

An account of sunspots, flares, and prominences seen on the sun, and their effects on weather and radio-communication. A useful introduction to the subject for the beginner. A-B

- SINCLAIR, H. M., ed. 714
 Essential fatty acids: fourth international conference on biochemical problems of lipids, Oxford, 15-18 July 1957. Ed. by H. M. Sinclair. Butterworths Scientific Publications, 1958. pp.xviii,268, illus., tables, diags., bibliogs. 50s.

Important work for chemists and clinicians working in the field of the relation of fatty acids to some types of heart disease. C

59 ZOOLOGY

- BANNERMAN, D. A. 715
 Larger birds of West Africa: illustrated by H. Gronvold. Penguin, 1958. pp.195, illus., 2s. 6d. *African series, ed. by David and Helen Kimble.*
 Technical but readable and well illustrated in black and white. A-B
- CARRINGTON, R. 716
 Elephants: a short account of their natural history, evolution and influence on mankind, ill. by M. Wilson and others. Chatto & Windus, 1958. pp.272, illus., plates, map, diags., bibliog. 25s. A
- ESSIG, E. O. 717
 Insects and mites of western North America: a manual and textbook for students in colleges and universities and a handbook for county, state and federal entomologists and agriculturists as well as for foresters, farmers, gardeners, travelers, and students of nature. 2nd ed. Macmillan (N.Y.), 1958. pp.xiii, 1050, illus. \$18.
 Revision of the book first issued in 1926, giving corrections and additions. B
- ZIMMERMAN, E. C. 718
 Insects of Hawaii: a manual of the insects of the Hawaiian Islands, incl. an enumeration of the species and notes on their origin, distribution, hosts, parasites, etc.; vol. 6, ephemeroptera-neuroptera-trichoptera and supplement to volumes 1 to 5. Honolulu, University of Hawaii P., 1957. pp.ix,[1],209, illus. \$4.50.
 Vols. 1-5 appeared in 1948. B

6 APPLIED SCIENCES

62 ENGINEERING

620.1 Strength of materials

- CORROSION CONVENTION 719
 Industry fights corrosion: the proceedings of the Corrosion Convention [held at Central Hall, Westminster, 15-16 October 1957]. Technology, 1958. pp.[ii], 107, illus., tables, diags. 21s. D
- INSTITUTION OF METALLURGISTS 720
 Effect of surface on the behaviour of metals: lectures delivered at the Institution of Metallurgists course, 1957. London, Iliffe; N.Y., Philosophical Library for the Institution, 1958. pp.100, illus., diags., bibliog. 21s.
 Papers as presented at the 1957 Institution of Metallurgists refresher course, dealing with the important part which surface conditions play in influencing the behaviour of metals. C

621 Mechanical engineering

- AMERICAN VACUUM SOCIETY 721
 1957 fourth national symposium on vacuum technology: transactions. Ed. by W. G. Matheson. London, [etc.], Los Angeles, Pergamon P., 1958. pp.[10],176, illus., diags., bibliog. 90s. or \$12.50. C
- BOYD, J. 722
 Lubrication science and technology: ASLE transactions; vol. 1, no. 1. London, N.Y., [etc.], Pergamon P., 1958. pp.vii,231, illus., tables, diags., bibliog. 105s. or \$15. *A publication of the American Society of Lubrication Engineers.*
 A valuable addition to the literature of lubrication technology, intended to give more prompt publication of papers read at annual meetings and at the lubrication conference. C

- CAMM, F. J., *ed.* 723
Newnes engineer's manual: for designers, draughtsmen, toolmakers, turners, fitters, mechanics, erectors, and students. 5th ed. (rev. and enl.). Newnes, 1958. pp.ix,334, illus., tables, diagrs. 35s.

First ed. 1940. Contains information likely to be required by draughtsmen and mechanical engineers in their daily tasks. B

- HART, I. B. 724
James Watt and the history of steam power. London, N.Y., Abelard-Schuman, 1958. pp.xiii,250, illus., plates, diagrs., bibliog. 21s. or \$4.

Describes efforts of pioneers to provide steam power, culminating in the life-work of Watt, whose engines successfully accelerated the Industrial Revolution in England and Scotland, and later in Europe. A

- OATES, J. A. 725
Automation in production engineering: a practical guide to automatic production and gauging in machine shops. Newnes, 1958. pp.vii,326, illus., diagrs. 45s.

A very wide range of automatically operated equipment is covered, with sufficient detail to enable a production engineer to determine what methods are available for tackling a problem, to understand the principles involved, and to become aware of the principal manufacturers of available equipment. B

- SPALDING, D. B. and COLE, E. H. 726
Engineering thermodynamics: an introductory text. Edward Arnold, 1958. pp.viii,375, tables, diagrs., bibliog. 28s.

Covers a first-year course in thermodynamics for engineers and is based on lectures given at Imperial College. B

621.039 Nuclear engineering

- HANDBOOK of the atomic energy industry; consulting ed. S. Jefferson. Newnes, 1958. pp.[277], tables, diagrs. 35s. 727

A reference book covering all aspects of the atomic energy industry with emphasis on British practice. A-B

- TAYLOR, E. O., *ed.* 728
Nuclear reactors for power generation. Newnes, 1958. pp.vii,144, illus., tables, diagrs., bibliog. 21s.

A concise introduction to the design and operation of power reactors for practising engineers. B

621.4 Internal combustion and heat engines

- HRYNISZAK, W. 729
Heat exchangers: applications to gas turbines. London, Butterworths Scientific Publications; N.Y., Academic P., 1958. pp.xii,343, illus., tables, diagrs., bibliog. 63s. or \$10.

About the best existing discourse on the design of heat exchangers for gas turbines. Information on air pre-heaters, of interest to nuclear power engineers, is included. Author is an engineer already widely known in Britain and abroad. C

621.7 Workshop practice

- ROPER, F. D. 730
Cores and coremaking. A & U, 1958. pp.126, illus., tables, diagrs. 21s.

A much-needed, well-illustrated, and competent outline of the practice, incorporating recent techniques. It will be particularly useful for students and craft apprentices. B

621.8 Power transmission

- BOLZ, H. A. and HAGEMANN, G. E., eds. 731
Materials handling handbook. N.Y., Ronald, 1958. pp.1595, illus. \$20.
Sponsored by the American Society of Mechanical Engineers and the American Material Handling Society. Special sections are devoted to cranes, road vehicles, and ships. D

623 Military and Naval engineering

- STEBBINS, H. M. 732
Rifles: a modern encyclopedia. Harrisburg, Pa., Stackpole, 1958. pp.viii,376, illus. \$12.50. A

629 Transport engineering

- MOLLOY, E. and SEALE, J., eds. 733
Commercial vehicle and tractor wiring diagrams; covering over 600 commercial vehicles and agricultural tractors. Newnes, 1958. pp.viii,296, diags. 30s.
A book showing the wiring diagrams for over forty different makes of commercial vehicles. The purpose of publishing the book is obscure, since all vehicle makers willingly supply wiring diagrams. B

- NAYLOR, J. L. and SAUNDERS, T. F., eds. 734
Handbook of the aircraft industry. Newnes, 1958. pp.x,341, illus., tables, diags. 35s. *Newnes industrial handbook*.
Useful survey of the state of the aircraft industry in 1958. Distinguished and authoritative contributions and a useful index. Particularly recommended for technical students contemplating careers in the industry. A

- SPREADBURY, F. G. 735
Electricity in aircraft. Constable, 1958. pp.ix,342, illus., tables, diags., bibliog. 40s.
Operation and servicing of aircraft electrical power supplies and distribution systems for electrical maintenance staff. B

63 AGRICULTURE

- CHANDLER, W. H. 736
Evergreen orchards. 2nd ed., thoroughly revised. London, Kimpton, 1958. pp.535, illus., bibliog. 63s.
The most obvious difference between the two editions is that the general discussion in the first part of the book has been considerably shortened, while that on each of the species has been expanded. B

637 Dairying

- HARRINGTON, G. 737
Pig carcass evaluation. Farnham Royal (Bucks.), Commonwealth Agricultural Bureaux, 1958. pp.xi,107, diags., bibliog. 15s. *Commonwealth Bureau of Animal Breeding and Genetics, technical communications, no. 12*.
Does not deal with genetic or environmental investigations. C

65 COMMUNICATIONS, COMMERCE, and ORGANIZATION

- DAVIES, M. and VERHULST, M., eds. 738
Operational research in practice: report of a NATO conference. London, N.Y., [etc.], Pergamon P. for Advisory Group of Aeronautical Research and Development, NATO, 1958. pp.ix,201, plates, tables, diags., bibliog. 84s. or \$12.
A unique volume for those who have to make high-level decisions on methods of optimum deployment of resources. A

657 Accountancy

PARSONS, C. W. S.

739

Estimating machining costs. N.Y., London, McG-H, 1957. pp.366, illus. \$8 or 62s.

Useful for production engineer, planner, and estimator. Assumes a fair workshop knowledge of processes, and some experience is necessary to appreciate it fully. C

66 CHEMICAL TECHNOLOGY

COOK, M. A.

740

The science of high explosives. N.Y., Reinhold; London, C & H, 1958. pp.xv, 440, illus., tables, diagrs., bibliog. \$22.50 or 180s. *American Chemical Society, monographs, no. 139.*

Should be of great interest to research workers in the field of explosives and a valuable textbook for those engaged in the explosives industry. C

KHARBANDA, Q. P.

741

Nomograms for chemical engineers; with foreword by Sir H. Hartley. London, Heywood; N.Y., Academic P., 1958. pp.xi,247, tables, diagrs., bibliog. 80s. or \$15.

Chemical engineers working mainly with organic liquids, who want quick answers and slide-rule accuracy, could make good use of this well-produced collection of nomograms. D

664 Food industries

BENNION, E. B. and STEWART, J.

742

Cake making. 3rd ed. L. Hill, 1958. pp.312, plates, tables, diagrs., bibliog. 30s.

Covers the syllabus of work for those taking National Bakery Diploma examination, the Final City & Guilds of London Institute examination in flour confectionery, and the full Technological Certificate of that Institute. Includes a section on machinery. B

669 Metallurgy

HANSEN, M.

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